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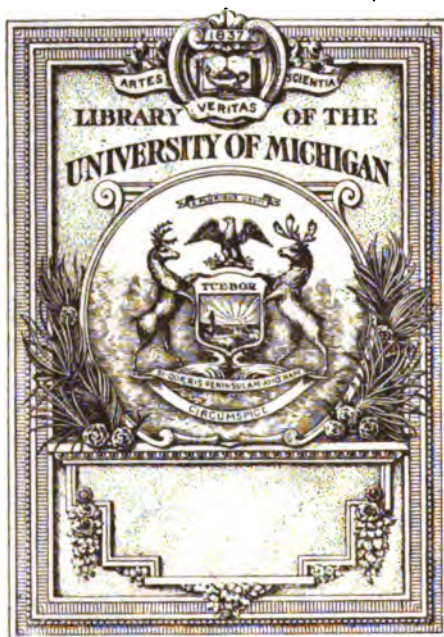
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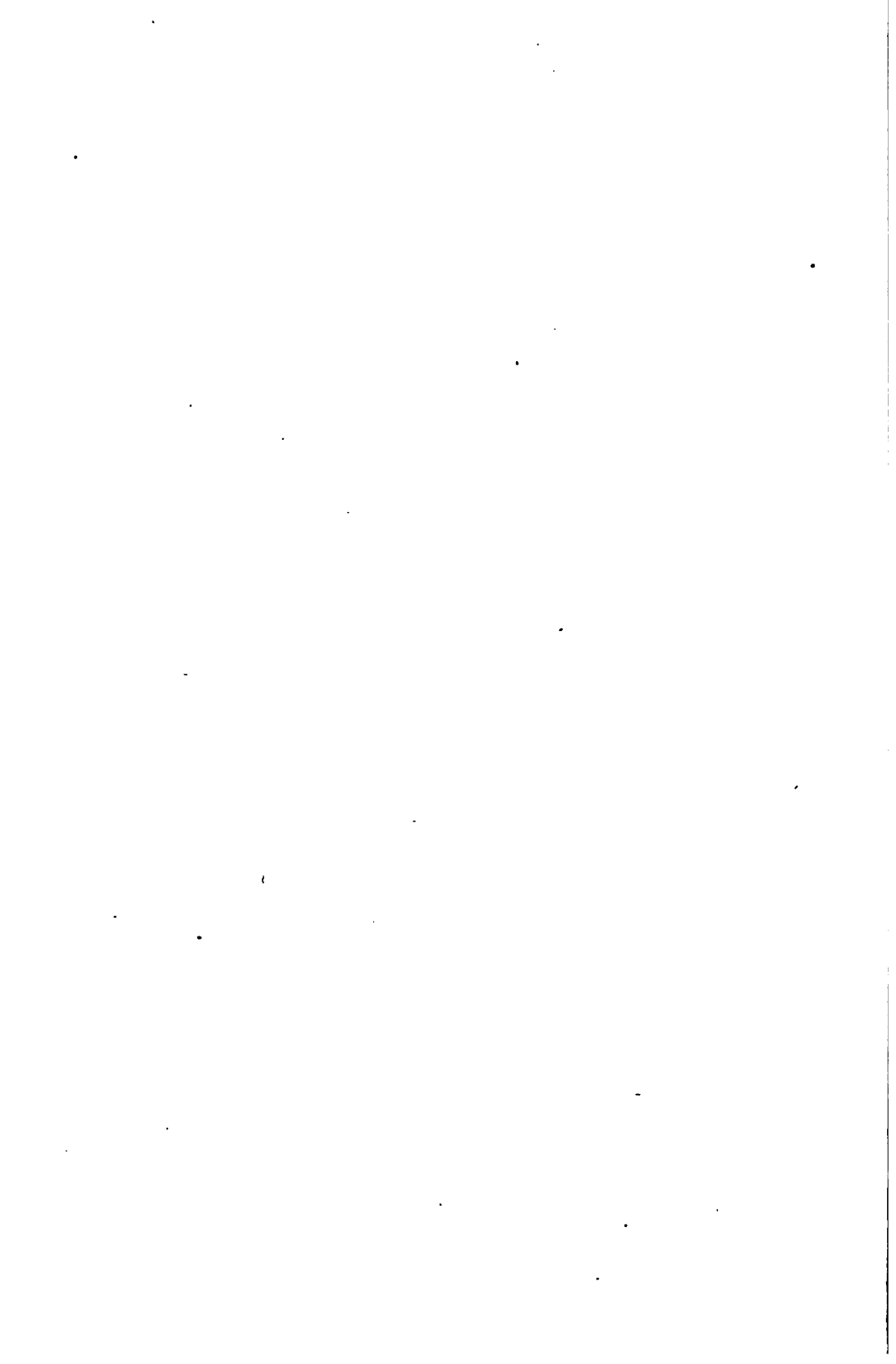
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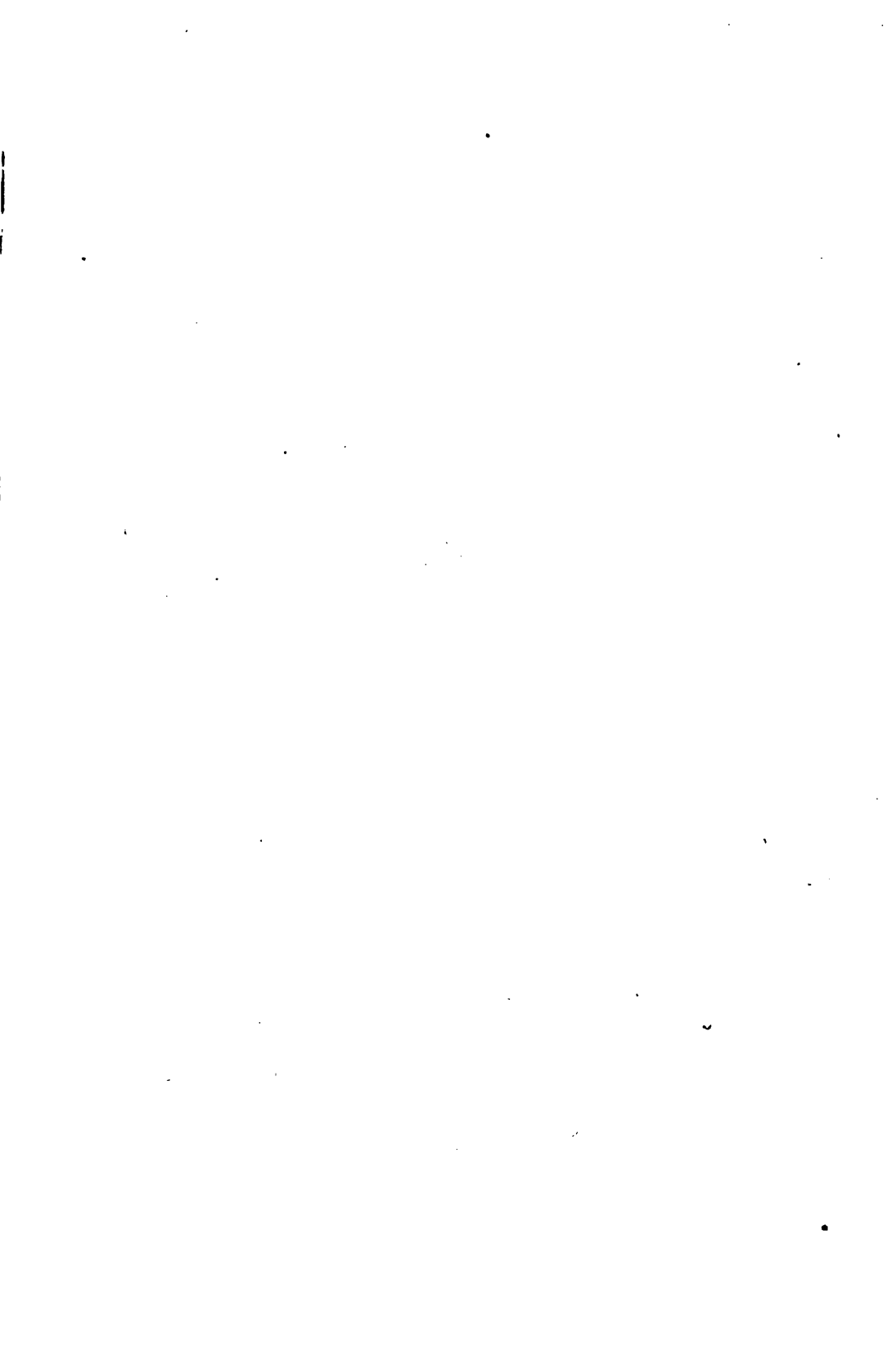
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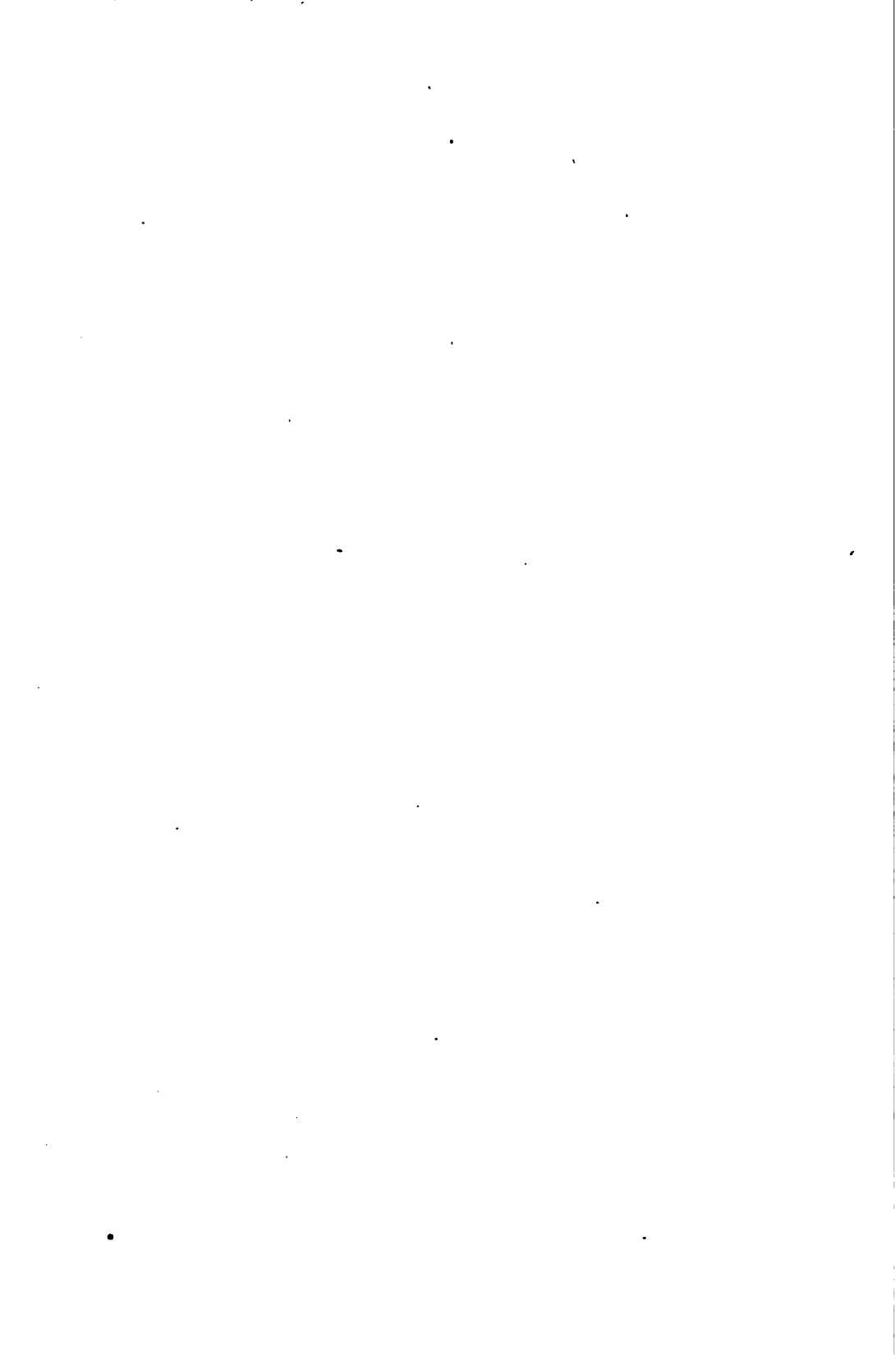
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**Fourth Biennial Report of the**

**Bureau  
of Labor  
Statistics**

**of the State of Colorado**

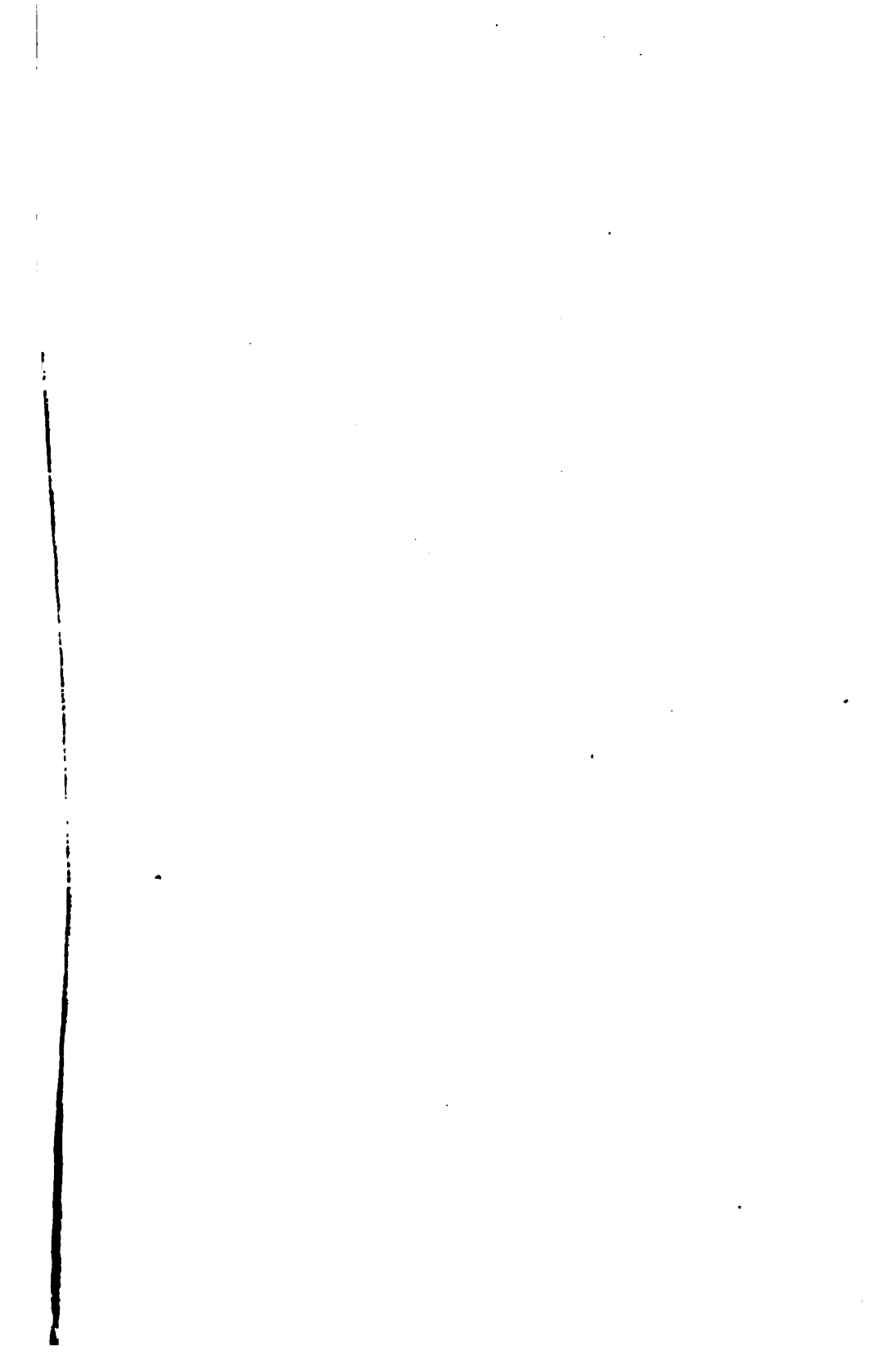
**..... 1893-1894**

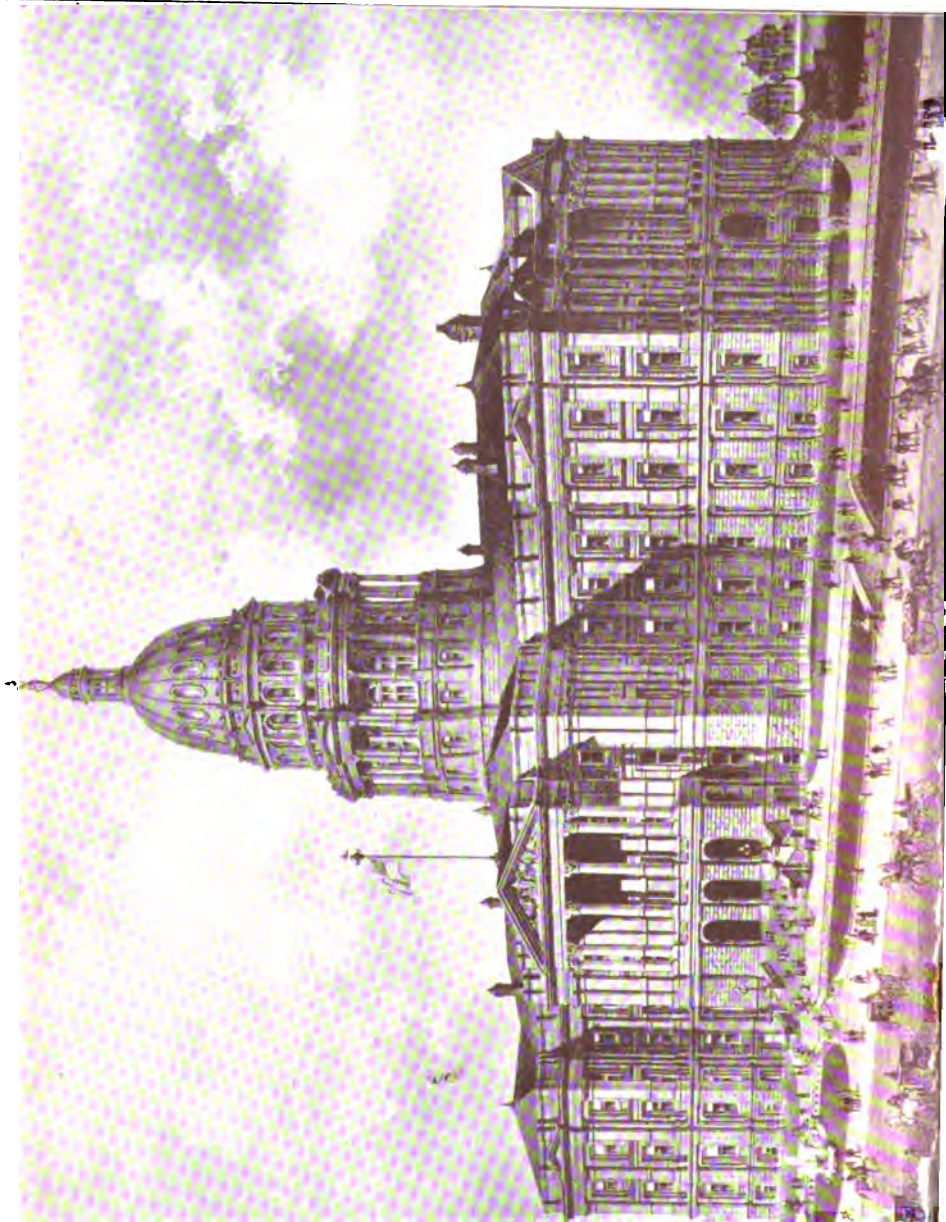


**NELSON O. McCLEES, Secretary of State**  
**Commissioner ex-officio**

**J. W. BRENTLINGER, Deputy Commissioner**

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# FOURTH BIENNIAL REPORT

OF THE



# Bureau of Labor Statistics

OF THE

STATE OF COLORADO

1893-1894.



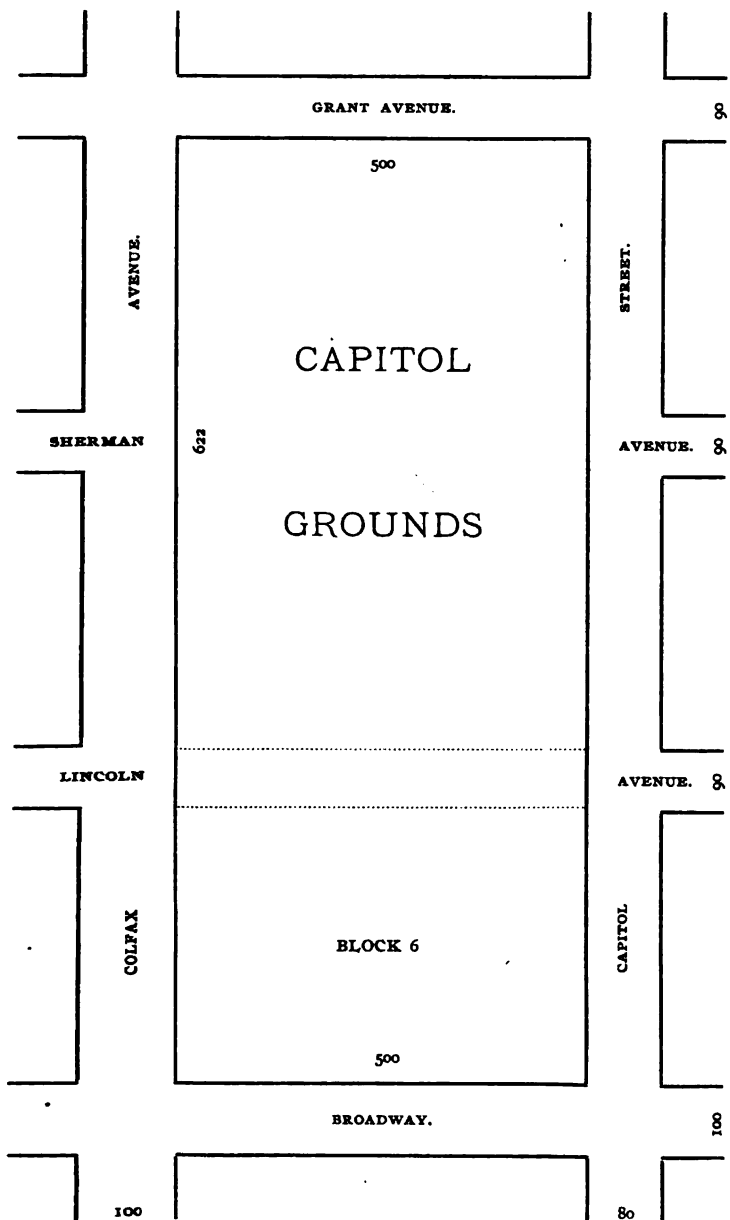
**NELSON O. McCLEES**, Secretary of State, Commissioner *ex-officio*

**J. W. BRENTLINGER**, Deputy Commissioner

DENVER, COLORADO:  
THE SMITH-BROOKS PRINTING CO., STATE PRINTERS.  
1894

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## Description of the Colorado State Capitol.

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The building is of the Corinthian order of classic architecture—a style admirably adapted to public buildings of like character and magnitude.

It contains a sub-basement, a full basement, and first, second and third stories, constructed entirely of cut-stone, with surfaces smoothly dressed for all the exterior work above the grade line, and is surmounted by an elegant dome. The entire workmanship of the four fronts and dome is strictly Corinthian, having no unnecessary carving, but ornamented simply by the embellishments demanded by the Corinthian order, which, like its two classic sisters, relies for its grand effects upon correct proportions and properly treated details, rather than elaborate and excessive ornamentation.

In the main pediment is presented an allegorical group of statuary, representing the wealth, progress and substantial interests of the state of Colorado, and the various channels leading to their development.

### VENTILATION.

This most important requisite to a public building has been fully and intelligently provided for. By use of powerful exhaust fans, the foul air is constantly taken from every portion of the building, and forced directly into the smoke shaft. The vacuum thus produced is at once supplied with an equal amount of fresh air, taken at a point one hundred

and eighty feet above the ground, at the corners of the dome wall, where the air is never contaminated with dust or foul vapors. The air thus received by the use of supply fans is forced through the fresh air ducts to every part of the building, and properly warmed by contact with the direct radiators before its admission into the apartments and corridors.

### HEATING.

The building is heated by steam, generated by four steel boilers, which are located in the sub-basement. These boilers also supply steam for the operation of the pumps in connection with the elevators, and for the operation of the ventilation of the building.

### THE SUB-BASEMENT.

In the sub-basement are located the boilers, engine, exhaust and supply fans, and ample room for the storage of fuel. The fuel room is reached by an underground passageway from the street, with suitable tracks, so that coal may be brought into the building by this system, thereby avoiding the nuisance of coal dust, which would result should other methods be adopted. Below the sub-basement floors which are concreted, are placed all the foul-air ducts, the steam supply and return lines, together with the drainage and sewerage of the building.

### THE BASEMENT.

The basement story has a clear height of fifteen feet, and all of the apartments are well lighted. It contains rooms for the adjutant general, state geologist and mineral cabinet, commissioner and inspector of mines, horticultural and historical societies, storage and vault rooms for secretary of state, janitor and engineer's living rooms, wash rooms, and water closets.

## THE FIRST STORY.

On the first floor are the apartments of the governor, attorney general, secretary of state, state auditor, state treasurer, commissioner bureau of labor statistics, superintendent of public instruction, insurance commissioner, and state engineer. All the offices are provided with fireproof vaults, and wardrobe accommodations for most of them. The offices have been arranged and located with especial reference to their business connections with each other, and the convenience not only of the officers who occupy them, but of those who have public business transactions therein. The story has a clear height of twenty-one feet, and has spacious and well-lighted corridors, extending the entire length and breadth of the building, and crossing at the spacious rotunda in the center.

## SECOND STORY.

Upon the second floor are located the legislative halls, the supreme court room, consultation and private rooms of the judges, the state library, librarian's apartments, legislative postoffice, and rooms for legislative officers. The legislative halls and state library occupy the height of the second and third stories, as more fully described below. The representative hall occupies the west front, being 63 feet in length by 52 feet in width, and having a height of 42 feet. Connected with it are the rooms of the speaker and clerk, lobbies, and appropriate cloak and toilet rooms. Private stairs lead from the consultation rooms to the galleries, which are on the line of the third story floor. The ceiling of the hall is coffered and paneled, and the walls surrounding the room have fluted pilasters with Ionic caps on the floor line, and the same with Corinthian caps on the line of the gallery, with stucco cornices on each line of caps. The senate chamber is at the south end of

the building, and corresponds in height and character of finish with the representative hall. It is 64 feet in length by 37 feet in width, and has in connection the rooms required for the officers and committees of the senate, corresponding with those provided for the house.

The state library—with the law library adjoining—is located at the east front of the building, also occupying the height of the second and third stories. The state library is 67 feet in length by 50 feet in width, each tier of alcoves being reached by circular iron stairs from the office of the librarian. The law library, adjoining the state library, has a length of 48 feet and a breadth of 32 feet, with two consultation rooms for attorneys adjoining, and forming a direct connection with the supreme court room. The supreme court room is also located upon the second floor, and has adjoining it private and consultation rooms for the judges, and offices for the clerk and marshal. Connected with the judges' apartments is a fireproof vault, for the deposit of records and other valuable papers.

### THE THIRD FLOOR.

The larger portion of this story is taken up by the galleries of the principal apartments already described upon the second floor. The remainder of the story is occupied by committee rooms, offices for engrossing and enrolling, which are admirably adapted to the purpose by the superior light afforded, and rooms for storage.

### THE ROTUNDA.

The rotunda is a magnificent feature of the building, and not only adds greatly to its beauty, but is of great utility also in furnishing an abundance of light to the halls and corridors. It has a diameter of 45 feet, being open from the basement to the dia-

phragm of the dome, and having balconies surrounding it on a line with the several floors. The walls of the rotunda are of a proper finish for fresco ornamentation, and may be suitably decorated at any time, and thereby made more attractive and interesting by representations of the men, or the industries or resources of the state, all of which have combined to place Colorado in the foremost rank of the sisterhood of states. In the walls of the rotunda, on the line of the several balconies, niches and recesses are provided for the reception of appropriate statuary. Promenades are provided around the exterior of the dome, and stairways lead from the attic floor to the lantern, affording to the sightseer an unequalled view of the surrounding country.

#### THE CORRIDORS.

The broad and ample corridors add largely to the interior beauty of the building. Those of the main floor have beautiful tile floors. On either side of the rotunda rise the grand stairways, constructed entirely of iron.

#### SKYLIGHTS.

The legislative halls, the supreme court room, the state and law libraries and the stairways will all be lighted by beautiful stained-glass skylights, the portions of the roof directly over these skylights being of heavy hammered glass, so that an abundance of light is admitted in each place where it is required. The dome will also have beautiful windows of stained glass.

The building, when completed, will be the finest in the state of Colorado, and one of the finest capitol buildings in the country, of which every citizen of the state may be justly proud.

The following is a further description of the building, with number and sizes of rooms, together with drawings of the several floors, by R. C. Greiner, civil engineer, who laid off the foundations for the first contractor, W. D. Richardson:

## DIMENSIONS.

	FT.	IN.
North and south .....	294	4
Projections, 6 feet 5 inches each .....	13	10
Porticoes, 13 feet 5 inches each .....	26	10
Approaches, 24 feet 5 inches each .....	48	11
Extreme length .....	383	11
East and west—through centre of building .....	230	10
Porticoes, 13 feet 5 inches each .....	26	10
West frontage approaches .....	32	6
East frontage approaches .....	22	10
Extreme width .....	313	00
Frontages—		
East, Grant avenue .....	95	2
West, Lincoln avenue .....	95	2
South, Capitol avenue .....	160	5
North, Colfax avenue .....	165	5
Height of building, from grade line to gutter in upper cornice .....	86	5
Height of building, from concrete to gutter in upper cornice .....	102	6
Height of west pediment, from grade line to top .....	92	5
Height of dome, from top of concrete to top of statue .....	272	2
Height of dome, from grade line to top of statue .....	256	0
Capacity of State Library—		
Volumes .....		25,000
Capacity of Law Library—		
Volumes .....		13,000

## CORRIDORS.

Basement—	FT.
Length, north and south .....	271
72 feet south of dome .....	56 wide
72 feet north of dome .....	56 wide
36 feet south of dome .....	36 wide
36 feet north of dome .....	36 wide
Length, east and west .....	199
In centre .....	70x70
West front .....	35 wide
East front .....	15 wide
Circular corridor in dome, diameter .....	42



## First Story—

North and south, up to vestibules.....	272
72 feet south of dome.....	56
72 feet north of dome.....	56
36 feet south of dome.....	37 wide
36 feet north of dome.....	37 wide
East and west, up to vestibules, length.....	200
In center.....	71x71 wide
West front.....	36 wide
East front.....	16 wide
Circular corridor in dome, diameter.....	42

## Second Story—

North and south, length.....	200
East and west, length.....	75
East and west.....	56 wide

## Third Story—

North and south, length.....	191
East and west, length.....	66
East and west.....	56 wide.

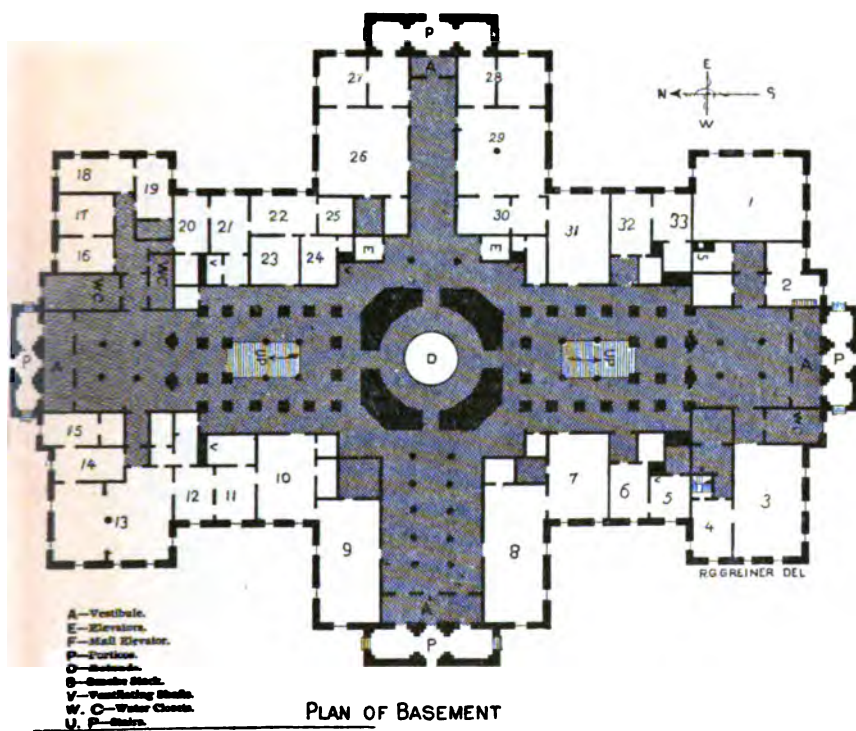
## HEIGHTS OF STORIES.

	FT.	IN.
Sub-basement.....	14	6
Basement.....	15	2
First story.....	21	0
Second story.....	21	4
Third story.....	20	4

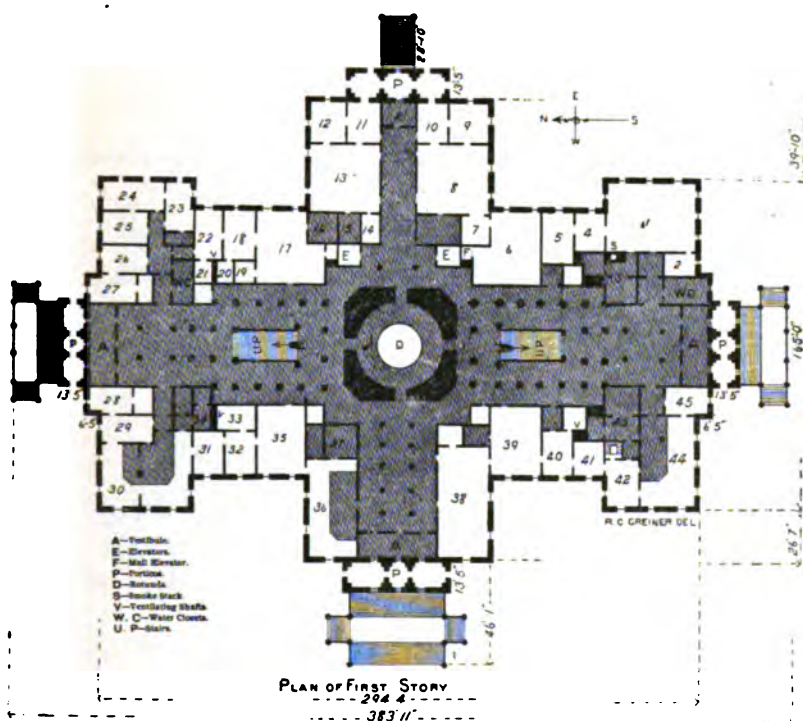
## NUMBER OF ROOMS IN BUILDING.

Basement.....	33 rooms
First story.....	45 rooms
Second story.....	49 rooms
Third story.....	33 rooms
Total.....	160 rooms

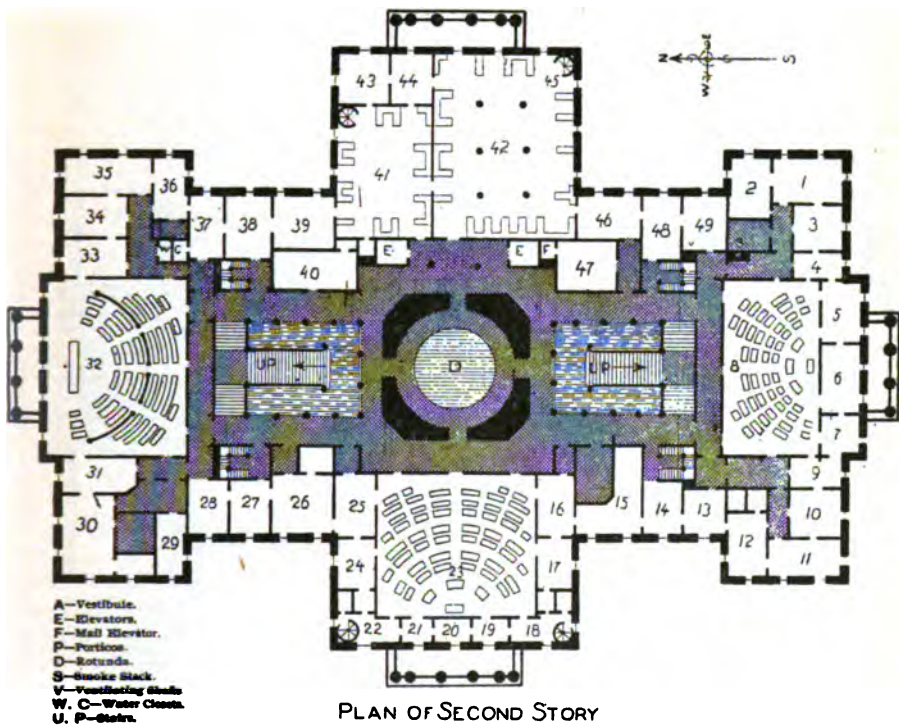






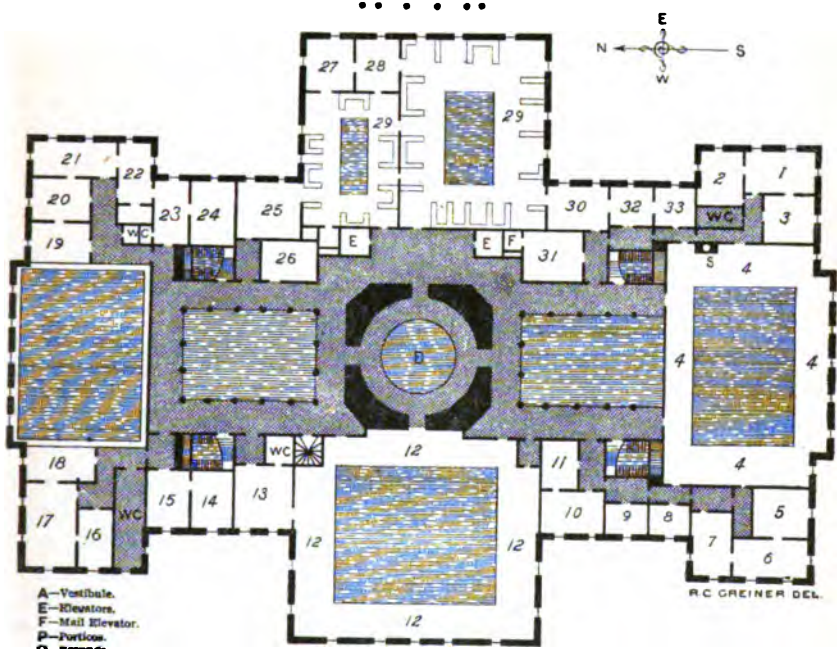












PLAN OF THIRD STORY.



## Letter of Transmittal.

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OFFICE OF SECRETARY OF STATE, }  
BUREAU OF LABOR STATISTICS, }  
DENVER, COLO., November 30, 1894. }

To the Tenth General Assembly of the State of Colorado:

Pursuant to law, I have the honor to transmit herewith the Fourth Biennial Report of the Commissioner of Labor.

The officers of the bureau have devoted much time to various phases of industrial conditions, pursuing their investigation in conjunction with departments of labor in other states. This concert of action was mutually advantageous, owing to the general depression in commercial and manufacturing centers, and the abnormal status of the finances of the nation which has prevailed for nearly two years.

Notwithstanding you are familiar with some of the disastrous effects of governmental action in demonetizing silver, thereby contracting the volume of money and depreciating values, yet I desire to call your attention to the prostrated condition of the wealth producers of Colorado, due to the same cause. The limited resources of the labor bureau have not prevented the collating of abundant material for serious consideration of the law makers of the state and nation.

The rapid fall of the scale of wages in every channel of labor; the marked shrinkage in values of agricultural products, commercial commodities and realty accompanied the repeal of the silver purchasing clause of the Sherman law, which were followed by industrial paralysis, the sale of national bonds and the increased labor purchasing power of gold, are all productive of vital statistics to a commonwealth included in the nation's distress.

Blessed by varied and bounteous resources, the producing classes of Colorado have been more self-dependent than those of other states; yet the comparative figures presented suggest a condition that cannot be improved by the financial theories advanced by European bondholders for the amelioration of an American people in enforced idleness.

The report contains an epitome of the labor disturbances which swept the continent, showing Colorado more fortunate in escaping serious conflict and dire results than some of her sister states.

I desire to express my appreciation of the diligence and faithfulness of Deputy J. W. Brentlinger with which he has labored during this eventful period in the performance of his duties. The extent and accuracy of the statistics furnished attest that he has intelligently added to the warp and woof so successfully started by his predecessors.

Trusting you will find in this report information of value in the enactment of laws for the people, as well as references for your deliberations, I am

Very respectfully,

NELSON O. MCLEES,

Secretary of State, ex-Officio Commissioner of Labor.

## An Address.

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The following, addressed to the Industrial congress assembled in the city of Denver, in July, 1894, is published because it contains an epitome of the work done by this bureau and recommendations intended to promote the more efficient and economic working of this department, to which matter the attention of the legislature is respectfully solicited:

To the Industrial Organizations of Colorado, assembled in Congress:

Believing that you represent citizens who feel more directly an interest in the bureau of labor statistics than other citizens of the state, I thought it would be well to take the opportunity presented me by the assembling of this congress to lay before you the operations of this department and to give you a statement of the changes we advocate in order that this bureau may be more efficient in the promotion of the interests of labor.

In March, 1893, we began a careful canvass of towns of Colorado in order to ascertain the number of unemployed in the state, and as a result secured the statistics from all the important towns, which gave an aggregate of about 8,000 persons, male and female, out of employment. This number probably represents fairly the normal aggregate of the unemployed in the state at that season of the year. After the slump in silver in June, 1893, I caused blanks and circular letters to be sent to

every post office in the state in order to ascertain as nearly as possible the effects of the demonetization of silver upon the industries of Colorado.

About sixty per cent. of the blanks were returned and the information tabulated and issued as bulletin No. 2. While the results obtained were as satisfactory as could be expected under the conditions, they would have been much more accurate had the department been able to pay for the gathering of fuller returns. However, the report shows 45,000 thrown out of employment during sixty days ended August 31, 1893; 22,500 as having left the vicinity where they had been employed; 1,500 of whom received 17,307 meals through the efforts of the Denver Trades Assembly. There had been 377 business failures in the state with 362 attachments served by the sheriff of Arapahoe county alone, and seventy-two assignments for the benefit of creditors made by business men of this county.

In July, 1893, the laws of the state of Colorado relating to labor were compiled, published and 1,000 copies mailed to labor organizations and workingmen of the state. Blanks for obtaining information as to farm products, expenses and profits or losses in farming for the year ending November 1, 1894, were printed and many of them distributed personally from this office to farmers. It is hoped there may be enough of them returned from different parts of the state, so that when compiled, a fair estimate of what the farmer has been enabled to accomplish during the past year may be obtained. Similar blanks have been widely distributed by hand to the tradesmen and laborers in the cities and from them I confidently look for returns which will enable me to lay before you in my report a table of valuable statistical information. But whether or not I obtain the desired facts depends upon you farmers and workingmen. I regret to say the state provides only \$300 per annum for the collection of statistics—a

sum not sufficient to canvass Denver properly, for accurate information, on any one of a dozen subjects which this bureau is directed to supply biennially to the legislature, therefore, I have not been able to pay canvassers for their services and have largely to depend upon the intelligent co-operation of the citizens of Colorado for the measure of success achieved by the bureau.

In addition to the statistical work of the department, there has grown out of the exigencies of the situation other duties which now require the full time of one man to perform. The bureau has become a sort of agency for the collection of small debts. The hard times of the past year has made it impossible for some employers to pay their help, while others make the situation an excuse for not paying their just debts and seek to defraud the laborer of his hire. For the year 1893 our records show that 719 persons called upon us to assist them in collecting \$22,273.62. We collected about 60 per cent. of this amount, 40 per cent. of which was paid without the cost of a suit. During the year 1893, much time was employed in attending to cases growing out of frauds attempted on the workingmen by the employment agents of this city. It has been necessary in several instances to begin suit against violators of law and to run them out of the business, which has been done, and now but very little complaint is brought against those remaining who generally seem to be carrying on their business legitimately.

For the biennial report of the bureau, much valuable information has been compiled with regard to wages, lost time, expenses and amount paid out of savings for rent, showing the effect of the land owners' exploitation of the earnings of labor. A table has been prepared from existing reports showing average wages in various trades in periods of seven years each, from 1856 to 1891, by which it is shown that from 1856 to 1870 wages regularly in-

creased in all occupations during the two periods of seven years each, and that from 1870 to 1891 wages have declined on the average regularly during the three periods of seven years each. It is a noticeable fact that our spread eagle orators when figuring out the increased prosperity of the workingman under the benign influences "of sirs, the best and greatest government ever taken under the protection of Divine Providence;" always date the commencement of their era of prosperity somewhere between 1840 and 1860, studiously keeping hidden the fact that our "prosperity" as measured by wages, reached its zenith twenty-four years ago, and that ever since the condition of the wage earner has been growing steadily worse; as much from the increasing loss of time, as from decreasing wages. It is clear to my mind from the somewhat exhaustive investigation of the matter I have made, that any attempt to ascertain the relative condition of workers at different periods, which does not take into account the growing inconstancy of employment, is very misleading in its conclusions. The logical conclusion to which the intelligent economist is driven, is that under existing social conditions, wages tend toward the life line, across which men cease to produce. The tendency is irresistible though it may not be continuous; spasms of prosperity for shortening periods of time may intervene and furnish the party politician with his statistical testimony of assumed prosperity, yet surely, irresistably, will the operation of persistent causes produce the ultimate effect of the impoverishment of the many for the enrichment of the few. Millions, who with superhuman effort, strive to keep up a home to shelter the poverty of their loved ones, to whom the grim specter of want is an ever present menace, and millions more who have gone over the verge; who have become social outcasts; to whom the joys of a home is but a memory, and to whom the thought of a wife, daughter or sister, projects the shadow of a sin. These millions give the lie to those who boast



of our prosperity. The only evidence of our advancing civilization consists in the fact of the increasing numbers who, seeing through its shams and shameful disregard of human rights, seek to remove the cause. Believing that the examination of our social system and the underlying causes which, in the midst of increasing wealth exhibit these alarming evidences of having produced increasing poverty, is clearly within the province of this bureau and that your best interests are served thereby. I beg leave to suggest to you the propriety of your demanding that the bureau of labor statistics be put in a condition for effective work, and, as a means to the end in view, recommend the following changes be embodied in a bill for presentation to the next legislature:

First—That the office of commissioner of bureau of labor statistics be made an elective office and that the term of office be for four years.

Second—That the offices of mine inspectors and commissioners of immigration be abolished and the duties pertaining to those offices be performed under direction of the commissioner of the bureau of labor statistics by deputies appointed by him, and that he be entrusted with the execution of factory inspection, child labor, state employment agencies and such other laws affecting the interests of labor as may be enacted hereafter that can properly be assigned to his bureau.

Third—That legislative appropriations for incidental expenses of the bureau may be drawn from the state treasury upon the written request of the commissioner of the bureau of labor statistics to the auditor of the state for a warrant at such times, and in such amounts as the exigencies of the service may seem to him to demand; Provided, That he shall thereafter account by voucher properly filed with the auditor of the state for the amounts so expended.

Fourth—That the commissioner be authorized to lay before the legislature his estimate of the money required for his bureau, setting forth in detail, as fully as practicable, the items for which it is to be expended.

## Statistics of Farms, Homes and Mortgages.

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Compiled from Extra Census Bulletin No. 71.

During the ten years, 1880-1889, 9,517,747 real estate mortgages, stating amount of debt incurred, were made in the United States, representing an incurred indebtedness of \$12,094,887,793.

The number of mortgages made during one year increased from 643,143 in 1880, to 1,226,329 in 1889; or 90.68 per cent., and the yearly incurred indebtedness increased from \$710,888,504 in 1880, to \$1,752,568,274 in 1889, or 146.53 per cent.

With regard to mortgages on acre tracts, the number made during the ten years was 4,747,078, representing an incurred indebtedness of \$4,896,771,112. The number of these mortgages made in 1880 was 370,984; in 1889, 525,094, an increase of 41.54 per cent; while the incurred indebtedness increased from \$342,566,477 in 1880 to \$585,729,719 in 1889, an increase of 70.98 per cent.

The increase was relatively larger in the case of mortgages on lots. They numbered 4,770,669 during the ten years, and the indebtedness incurred under them amounted to \$7,198,106,681.

From 1880 to 1889 the annual number made increased from 272,159 to 701,229, an increase of 157.65 per cent. During the same time the amount of annual indebtedness incurred increased from \$368,322,027 to \$1,166,838,555, an increase of 216.80 per cent.

During the decade 622,855,091 acres were covered by 4,758,268 mortgages. The number of acres covered by mortgages in 1880 was 42,743,013; in 1889, 70,678,257, an increase of 65.36 per cent.

In the case of lots covered by mortgages the increase from 1880 to 1889 was 198.25 per cent., the number covered by mortgages in the former year being 429,995; in the latter year, 1,282,334.

At the end of the decade, January 1, 1890, the real estate mortgage indebtedness amounted to \$6,019,679,985, represented by 4,777,689 mortgages. These mortgages are divided into two classes, as follows: mortgages on acres, 2,303,061; amount of indebtedness, \$2,209,148,431; mortgages on lots, 2,474,637; amount of indebtedness, \$3,810,531,554. Number of acres covered by existing mortgages, 273,352,109; number of lots, 4,161,138.

It is computed that the average life of a mortgage on acres in the United States is 4.54 years; on lots, 4.75 years.

Since mortgages in force were made, 12.68 per cent. of the original amount of indebtedness incurred under them has been extinguished by partial payments. It appears that the real estate mortgage indebtedness in force in the United States is 16.67 per cent. of the true value of all taxed real estate, and untaxed mines.

Upon the assumption that all taxed real estate can be incumbered for two-thirds of its true value without increasing the rate of interest to cover additional risk, it follows that 25 per cent. of the real estate mortgage debt limit has been reached in the United States.

In Kansas 40.24 per cent. of the debt limit has been reached; in New Jersey 39.27 per cent., and in Colorado 19.62 per cent. The smaller percentages are found in the South and in the Rocky Mountain region.

The mortgage debt in force per capita in the United States is \$96. The three larger states averages (omitting the District of Columbia) are \$268 in New York, \$206 in Colorado, and \$200 in California.

The average rate of interest for all mortgages in this country is 6.6 per cent—7.36 per cent. on acres and 6.16 per cent. on lots. These rates make the annual interest charge on mortgaged acres \$162,652,944—on lots, \$234,789,848; or a total of \$397,442,792.

By personal inquiries in 102 counties in various parts of the Union it was ascertained that of the number of mortgages represented in the investigation, 80.13 per cent. were made to secure purchase money and to make improvements.

## FOURTH BIENNIAL REPORT

## NUMBER AND AMOUNT OF REAL ESTATE MORTGAGES MADE

AND NUMBER OF ACRES AND LOTS COVERED, 1886 TO 1889, BY YEARS, IN THE STATE OF COLORADO.

YEARS.	MORTGAGES STATING AMOUNT OF DEBT.						Number of acres covered by all mortgages on acres.			Number of lots covered by all mortgages on lots.	Number of mortgages not stating amount of indebtedness.		
	Total.		On acres.		On lots.								
	Num-ber.	Amount.	Num-ber.	Amount.	Num-ber.	Amount.	Total.	Stated.	Esti-mated.				
1880 .....	4,995	\$ 9,169,958	1,196	\$ 4,597,916	3,799	\$ 4,563,042	246,243	245,337	906	9,945	14	6	8
1881 .....	6,278	9,623,527	1,506	3,757,286	4,772	5,866,241	194,260	192,011	2,249	14,039	6	3	3
1882 .....	7,825	13,311,137	2,099	5,395,617	5,726	8,005,520	397,199	299,685	7,514	20,960	12	6	6
1883 .....	7,520	13,794,469	2,410	6,971,030	5,110	6,823,439	495,359	489,338	6,021	16,843	14	5	9
1884 .....	7,742	18,236,164	3,395	12,319,372	4,347	5,916,822	995,249	986,966	8,283	13,115	5	4	1
1885 .....	6,697	11,007,587	2,525	5,834,663	4,172	5,172,924	693,438	684,710	8,728	16,552	8	3	5
1886 .....	8,693	12,886,342	3,266	5,498,109	5,427	7,398,233	647,557	639,518	8,039	21,663	5	5	.....
1887 .....	14,912	22,608,892	5,052	8,330,568	9,860	14,278,324	999,975	922,047	7,928	49,569	9	6	3
1888 .....	23,917	33,328,589	8,990	10,876,769	14,927	22,451,820	1,432,186	1,420,858	11,328	74,366	5	3	2
1889 .....	29,495	54,218,578	9,291	16,461,103	20,204	37,757,475	1,660,488	1,642,588	17,900	113,339	10	6	4
Total ....	117,984	\$198,176,243	39,730	\$79,942,493	76,254	\$118,233,840	7,601,954	7,531,058	78,896	350,391	88	47	41

## AMOUNT OF INTEREST ON REAL ESTATE MORTGAGES.

GIVEN ON FARMS AND HOMES IN THE STATE OF COLORADO, 1880-1889, FIGURED UPON THE BASIS OF THE AVERAGE LIFE OF MORTGAGES IN THE UNITED STATES AND AT THE AVERAGE MORTGAGE RATE OF INTEREST IN COLORADO FOR EACH YEAR.

Year.	TOTAL.			ON FARMS.					ON LOTS.			
	Number of Mortgages.	Amount.	Average rate of int. per cent approx.	Interest for 4.66 years.	Number of mortgages.	Amount.	Average rate of interest, per cent.	Interest for 4.66 years.	1880 1881 1882 1883 1884 1885 1886 1887 1888 1889	Amount.	Average rate of interest, per cent.	Interest for 4.66 years.
1880	4,905	\$ 9,160,968	11 05	\$ 4,714,554	1,196	\$ 4,597,916	9 39	\$ 2,011,928	3,709	\$ 4,563,042	12 71	\$ 2,702,636
1881	6,278	9,623,527	10 93	4,901,312	1,506	3,757,266	10 21	1,787,664	4,772	5,866,241	11 39	4,113,648
1882	7,825	13,311,137	10 57	6,556,223	2,099	5,395,617	9 95	2,460,055	5,726	8,005,520	10 98	4,096,168
1883	7,520	13,794,469	9 98	6,411,049	2,410	6,971,030	8 89	2,887,916	5,110	6,823,439	11 08	3,523,133
1884	7,742	18,236,164	8 53	7,248,489	3,395	12,319,342	7 54	4,328,573	4,547	5,916,822	10 59	2,919,916
1885	6,697	11,007,587	9 99	* 4,400,207	2,525	5,834,663	9 19	2,144,822	4,172	5,172,924	10 90	2,255,395
1886	8,693	12,886,342	9 77	3,776,914	3,266	5,488,109	9 81	1,615,150	5,427	7,398,233	9 74	2,161,764
1887	14,912	22,608,892	9 02	4,080,074	5,052	8,330,968	9 08	1,512,831	9,860	14,278,324	8 99	2,567,243
1888	23,917	33,328,589	9 04	3,014,102	8,990	10,876,769	9 34	1,015,890	14,927	22,451,820	8 90	1,998,212
1889	29,495	54,218,578	8 22	2,229,356	9,291	16,461,103	8 53	702,066	20,204	37,757,475	8 09	1,527,290
Total	117,984	\$ 198,176,243	9 22	\$ 47,332,290	39,730	\$ 79,942,403	8 94	\$20,466,895	78,254	\$ 118,233,840	9 41	\$ 26,866,395

\* Interest from 1885 to 1889, figured for 4. 3. 2. 1 years and 1/2 year on respective amounts, in order to show interest payments for 10 years. But up to March 1, 1894, on the average, all outstanding mortgages have matured, and consequently there has been paid as interest on the above indebtedness the additional sum of \$40,130,784, making total payments of interest \$37,463,074 on the ten years' indebtedness, of which mortgages of farms have met \$34,016,325, or an average annual interest charge of \$2,319,295, while mortgages of lots have met \$3,446,749, or an average annual interest charge of \$3,644,100, or together \$5,963,395 annually.

## PERCENTAGE OF NUMBER AND AMOUNT OF REAL ESTATE MORTGAGES

MADE IN THE STATE OF COLORADO DURING THE TEN YEARS

1880-1889.

DESCRIPTION.	Number of Mortgages.	Per cent. of Number.	Amount of Each Class.	Per cent. of Amount.	Average Value of Each Class.
Mortgages under \$100 in value.....	3,929	3.33	\$ 237,811	.12	\$ 60 53
Mortgages \$100 and under \$500.....	43,666	37.01	12,088,752	6.10	276 85
Mortgages \$500 and under \$1,000....	27,242	23.09	17,617,868	8.89	646 72
Mortgages \$1,000 and under \$5,000 .	36,894	31.27	68,648,250	34.64	1,860 68
Mortgages \$5,000 and under \$25,000	5,592	4.74	48,454,091	24.45	8,664 90
Mortgages, \$25,000 and over.....	661	.56	51,129,471	25.80	77,351 70
Total .....	117,984	100.00	\$198,176,243	100.00	\$ 1,679 69

Average rate of interest, 9.22.



# AVERAGE AMOUNT OF EACH REAL ESTATE MORTGAGE

IN FORCE JANUARY 1, 1890. RATIO OF EXISTING DEBT TO VALUE AND POPULATION AND THE INCREASE OF DEBT IN COLORADO.

AVERAGE UNPAID AMOUNT OF EACH MORTGAGE IN FORCE.			Percentage of debt in force of true value of all taxed real estate.	Percentage of debt in force against acres of true value of all taxed acres.	Percentage of debt in force against lots, of true value of all taxed lots.	Existing debt per capita.	Average population to each mortgage in force.	Percentage of increase of debt incurred in 1889 over 1880.
Total.	For acres.	For lots.						
\$ 1,558	\$ 1,474	\$ 1,608	13.06	10.24	15.44	\$ 206 00	8	401.84

## FOURTH BIENNIAL REPORT

## ANNUAL INTEREST CHARGE

AND AVERAGE RATE OF INTEREST ON THE REAL ESTATE MORTGAGE DEBT IN FORCE JANUARY 1ST, 1890, IN THE STATE OF COLORADO.

ANNUAL INTEREST CHARGE.			AVERAGE RATE OF INTEREST.				Average Amount of Annual Interest Charge to each Mortgage.			Average Amount of Debt in force to each Mortgage—			Average number per each Mortgage in Force.			Percentage of Mortgages so taxed.		
Total.	On Acres.	On Lots.	Total.	On Acres.	On Lots.	Total.	On Acres.	On Lots.	Total.	Acres.	Lot.	Acres.	Acres.	Lot.	Acres.	Percentage of Mortgages so taxed.	Percentage of Mortgages so taxed.	Percentage of Mortgages so taxed.
\$7,293.447	\$2,690,379	\$4,603,068	8.57	8.91	8.39	\$134.00	\$131.00	\$135.00	\$8.64	\$300.00		171	5.35		30.02	?		

Males.		Females.		Total.	
Number.	Per Cent.	Number.	Per Cent.	Number.	Per Cent.
109	98	15	15	124	100

MAKERS.

Females above  
15 years.

Num- ber.	Wages.
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109	\$ 41,706
-----	-----------

98	\$ 35,400
----	-----------

1	624
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## Some Facts and Figures

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### WITH REFERENCE TO THE COST OF PRODUCING SILVER IN COLORADO.

Colorado produced in 1892 24,000,000 ounces of fine silver, or over 58 per cent. of the total production of the United States.

Of this 24,000,000 ounces, the two counties of Lake and Pitkin produced over 40 per cent. In these two counties the mining districts of Leadville and Aspen are located, known to the world as the two largest silver producers of the present time.

Reliable data regarding these two districts ought furnish conclusions that would be beyond question as to the general cost of producing silver, for the reason that the quantity of mineral and conditions in these camps must give most favorable results to the mine owner.

Leadville produces gold, lead and copper as "by-product" of her silver mines; while Aspen's output is all silver except a by-product of less than 7 per cent. in lead, and because of this difference in the product of the two camps a comparison of the results is interesting.

The history of Leadville as a silver camp began in 1879, and it appears by the certificate of the clerk and recorder of Lake county that from January 1, 1879, to June, 1893, there were filed in Leadville

district 19,449 locations of mining claims. The register of the United States land office certifies to the issuing of 3,803 patents in Leadville district.

By careful inquiry it is found that of these patented claims only 166 have produced ore which has been sold, and of these 166 not more than 85 can be said to have paid in the sense of returning money expended with any profit.

The number of mines now paying (June 1, 1893) does not exceed eighteen.

These facts are from smelters, ore samplers' and ore buyers' records, and from individual inquiry, and are reliable.

If we take the period of this history of Leadville district, 1879-1893, fourteen years, and make up a statement of the business of the district as regards its mines, we should have undoubted results as to the cost of its silver and other ores. So, keeping to the record as closely as possible, we charge the district with cost of its 19,449 locations as required by law, viz:

Each location, labor necessary for sinking discovery shaft and making location.....	\$ 100 00
Survey for location.....	10 00
Recording certificate .....	1 50
	<hr/>
	\$ 111 50
19,449 locations.....	\$2,167,563 00

These figures, of course, exclude the labor and money of the prospector expended in searching for locations, and which would aggregate an amount largely exceeding the legal cost as above set down.

On the 3,803 patents, the statutory fees and expenses are on each patent:

Fee of surveyor-general .....	\$ 30 00	
Fee for patent survey.....	75 00	
Fee for land office .....	10 00	
Fee for publishing notice.....	10 00	
Fee for drawing papers .....	25 00	
Fee for land, average 8 acres .....	40 00	
	<hr/>	
	\$ 190 00	
3,803 patents .....		\$ 722,570 00

In this item the \$500 worth of work which the law requires to be done on each claim before patent can be had is not charged, as account is hereafter taken of it.

To protect titles to locations the law requires that until patent issues there shall be performed \$100 worth of work on each claim in each year.

Of the 19,449 locations, it appears that 25 per cent. are valid and subsisting at present time, on which annual assessment work (\$100) for an average of ten years has been performed—

Making total expenditure on this account		
of.....	\$ 4,860,000 00	
Add cost of original location.....	2,167,563 00	
Add cost of patents.....	722,570 00	
	<hr/>	
Total .....		\$ 7,750,133 00

The expenditure in prospecting and abandoned workings must remain wholly undetermined. Every one who has any knowledge of a mining camp, or who has been interested in mining enterprises can testify to the large amount of money that has been expended, and of which no account or record is kept, and it must ever remain an unknown sum to be added to the figures that may be closely ascertained.

In Leadville the mining and smelting operations have been made matters of record, and tables have been compiled and published from year to year, based

upon data obtained at the time from original sources, and this data shows that there has been paid out for—

Labor in mines and smelters in the fourteen years (1879-1893).....	\$ 70,268,640
For lumber and timbers.....	7,955,000
Coke.....	6,521,040
Coal.....	7,028,520
Charcoal.....	3,020,000
Hardware and mining supplies.....	10,000,000
Machinery.....	3,500,000
Machine-shop work.....	1,875,000
Hauling ore.....	3,603,250
	<hr/>
	\$ 113,771,450
Adding cost of location, patent and assessment work.....	7,750,133
	<hr/>
Gives a total of.....	\$ 121,521,583

representing actual cost of discovery, location, patenting, operating, mining and smelting the ores of Leadville district during the fourteen years of its history, no account being taken of the money invested in smelters in the district.

Against this amount charge the district with the money received from its production of silver for the fourteen years, viz:



Year.	Ounces silver.	Average price per ounce.	Money value.
1879.....	6,004,416	\$ 1 12	\$ 6,724,945 92
1880.....	8,993,399	1 14	10,252,474 86
1881.....	7,162,909	1 13	8,094,087 17
1882.....	7,273,249	1 13	8,218,771 37
1883.....	9,590,172	1 11	10,645,090 92
1884.....	7,078,951	1 01	7,149,740 51
1885.....	8,314,593	1 06	8,813,468 58
1886.....	8,166,145	99	8,084,483 55
1887.....	7,148,968	97	6,934,498 96
1888.....	7,895,275	93	7,342,605 75
1889.....	8,596,034	93	7,994,311 62
1890.....	7,061,093	1 04	7,343,536 72
1891.....	7,535,526	90	6,781,973 40
1892.....	6,676,686	86	5,741,949 96
Total .....	107,497,416	-----	\$ 110,121,939 29

This total of yearly production (in ounces) is in excess of the figures given by the director of the United States mint, being derived from records of smelters, and probably includes some ores from mines outside of Leadville district, which will explain the discrepancy.

The total returns from yield of Leadville mines for the fourteen years in question, in gold, silver, lead and copper—

Amount to the value of.....	\$ 179,710,207
Deduct money value of silver product figured on basis (New York quotations) of average yearly price of silver, less 5 per cent, as received by mine owners .....	104,615,842
Leaves value of by-products.....	\$ 75,094,365
So it appears—	
Total cost of production, fourteen years.....	\$ 121,521,583
Less returns from silver produced.....	104,615,842
Would show a loss of .....	\$ 16,905,741

But the "by-products," gold, lead and copper, as above, give a net profit of \$58,188,624; clearly demonstrating that if Leadville district had been a producer of silver only, the money returned to the district would not have paid the cost of production on the basis of the prices received from the smelters, and the district was saved from loss by virtue of its incidental products of lead, gold and copper.

If silver had been worth to the mines during these fourteen years its coin value, the district would have received, in round numbers, \$131,500,000, or a profit on its silver production, provided no account is taken of the cost and expenditure in the district involved in "prospecting" and abandoned experiments.

Again, if Leadville had only been a silver-producing camp, the same as Aspen, the cost of the total silver product would have been over \$1.13 per ounce.

### ASPEN DISTRICT.

A comparison of the data from the Aspen district with the foregoing is interesting, and furnishes conclusions that can not be denied.

The following concise and explicit report, proceeding upon same lines as the Leadville data, can be fully substantiated by proofs in the hands of this committee:

Aspen, Colo., July 27, 1893.

Dear Sir—In response to your request for data regarding the cost of silver production in this county, a meeting of the principal mine owners and managers was held on the 14th inst. A complete organization was effected, the county was districted, and committees, including about forty of the best known of our citizens, were appointed to secure as complete and accurate data as possible. Blank forms for reports were printed and furnished, and notices were given out through the public press requesting accu-

rate and prompt returns from all citizens in possession of the information desired, and the undersigned were appointed as a committee to compile the statistics received and report the same.

A strong interest in the work was manifested by all our citizens who are engaged in the mining industry, and a large number of reports have been submitted to the committee. Many of these were authentic statements taken from book accounts, and others were reliable and conservative estimates prepared by persons in possession of a direct knowledge of the facts. All reports have been subjected to careful scrutiny by the committee and, of the total number received, 380 individual reports were considered in the preparation of the results submitted. Necessarily, in the short time occupied in the collection of data, the summary is incomplete, in that a large number of properties upon which large sums have been expended in development without returns have not been considered from lack of reliable data. On the other hand, properties which have produced largely, and at a profit, are all included, as the books of accounts in such cases are easily accessible. It may be assumed, therefore, with entire safety, that the actual cost per ounce of silver produced in this district will be somewhat above the result of the calculations herewith submitted.

A categorical answer of the questions submitted is as follows:

The total number of lode locations to date in the Aspen district, as certified by the county clerk and recorder, is 15,056. Of these, about fifty locations are at Independence, and cover gold leads, leaving total number of silver lode locations, say, 15,000.

The records of the county clerk's office show the total number of patented claims at 1,037; deducting thirty-one patented gold claims, leaves 1,006 patented silver-lode claims.

The number of patented and nonpatented producers, including all claims which have shipped even one ton of ore, is 98.

The number of profit-producing claims (or groups) is 18.

The number of claims or groups now (June 1) paying, 10.

The total production of silver to July 1, as returned by mine reports, is 34,689,451 ounces. Deducting 5 per cent. as the loss which ensues from smelting, leaves 32,954,978 as the net production in ounces.

The total cost of production, as tabulated below, is \$35,380,507.22, or \$1.074 per ounce. The items of cost included consist only of amounts paid for labor, supplies, plant, railroad freight, smelter charges, and a sum of about \$425,000 paid out in litigation expense. Purchase price, interest, and the cost of construction of tramways, roads, and public power plants, etc., are not included.

It will be seen that of the whole number of 15,000 locations but 380 cases are reported. After careful consideration and consultation with the mining engineers and others who possess special knowledge upon the point, it is assumed in this report that each location was made at an average cost of \$100 for labor, \$12.50 for surveying, and \$2.50 for recording, or \$115 per claim. From the same source of information the conclusion is drawn that of the original number of 15,000 locations, 6,500 are now "live claims," and that an average of not less than eight years' annual labor has been performed on each, amounting to a total expense of \$800 per claim. From actual measurement by the deputy mineral surveyor of development work performed upon the patented claims of the district, it is ascertained that the average cost per claim exceeds \$1,200. Other ex-

penses of obtaining patent are conservatively estimated at \$200, making a total cost to each patented claim of, say, \$1,400.

From these estimates the following table is derived:

15,000 locations, at \$115 each.....	\$1,725,000.00
1,006 patents, at \$1,400 each.....	1,408,400.00
6,500 "live claims," at \$800 each.....	5,200,000.00
380 claims reported .....	27,047,107.22

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\$35,380,507.22

Total number of ounces silver produced, 32,954,978.

Cost per ounce, \$1.074.

It may be proper to further state that the reliance of the mines of this district is upon the production of silver alone. A few of the mines produce lead; the total amount received for that metal by the mines of the district being estimated at less than \$4,000,000, no account of which is made in the figures above presented. No gold or copper is found in the ore.

Respectfully submitted.

FRED G. BULKLEY,  
WILLIAM J. COX,  
S. I. HALLETT,

Committee.

Approved:

DAVID R. C. BROWN, Chairman.  
ELIAS COHN, Secretary,  
F. T. FREELAND,  
D. M. HYMAN,  
F. M. COOMBS,  
E. M. RAY,  
D. W. BRUNTON,  
FRANK BULKLEY.

Attention is also directed to the fact that, neglecting one of Aspen's mines of phenomenal richness, the totals given would be as follows:

Total cost .....	\$33,908,508.81
Total ounces silver produced.....	26,524,843
Cost per ounce, \$1.23.	

Neglecting three principal producers will give the following figures:

Total expense.....	\$26,091,381.00
Total ounces silver produced.....	12,696,496
Cost per ounce, \$2.36.	

FRED G. BULKLEY.  
WILLIAM J. COX.  
S. I. HALLETT.

#### SUMMARY.

##### Leadville, fourteen years:

Total locations.....	19,499
Total patents.....	3,803
Total "live claims" .....	4,874
Total claims that have produced ore.....	166
Total claims that have paid.....	85
Total claims now paying.....	18
Production, ounces silver.....	107,497,416
By-product of silver mines, gold, lead, copper.....	\$75,094,365.00
Expenditure of district.....	\$121,521,583.00

Cost per ounce if there had been no by-product, \$1.13.

##### Aspen, eight years.

Total locations.....	15,000
Total patents.....	1,006
Total "live claims" .....	6,500
Total claims that have produced ore.....	98
Total claims that have paid.....	18
Total claims now paying.....	10
Production, ounces silver.....	32,954,978
By-products of silver mines, lead only, something less than.....	\$4,000,000.00
Expenditures of district.....	\$35,380,507.22

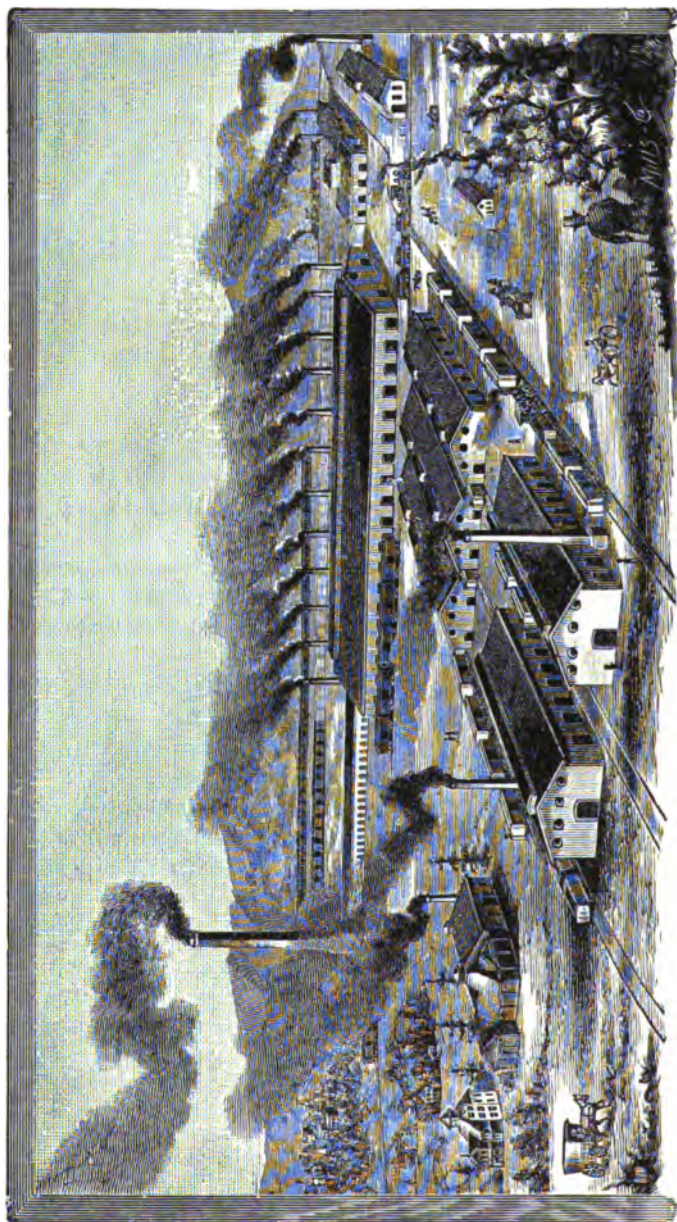
Cost per ounce if there had been no by-product, \$1.074.

## Smelter Production, First Ten Months of 1894.

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Reports received from four of the principal smelters in the state indicate a falling off in tons of ore smelted and values produced of about 40 per cent. as compared with 1893. A slight increase in gold values over the latter year is noticeable in some of the reports, amounting to probably 10 per cent., notwithstanding the marked decrease in the number of ounces of silver produced.

Owing to the inconvenience of making up statements for ten months of the year at the smelters, this bureau has been unable to get full reports from which the actual decrease in production could have been ascertained. Six of the largest smelters report an average of 1,593 employes, paying them \$2.34 per diem, and a total payment of \$1,150,774, or at the rate of \$1,380,928 per annum.





The cut on the opposite page, representing the plant of Philadelphia Smelting and Refining Co., at Pueblo, illustrates the most complete plant of its kind in Colorado.

The product consists of bullion containing silver and gold, which is sent East for preparation, and blister copper.

The plant consists of eight blast-furnaces, besides roasters, copper plant, sampling mill, etc. The corporation is owned and controlled by the Guggenheim family—Benjamin Guggenheim being general manager and Simon Guggenheim, secretary and treasurer.

Capital stock, \$1,250,000, paid in.

Capacity of furnaces, 600 tons per diem.

Average number of employes, 450.

Average monthly pay-roll, \$27,000.

Value of annual product, about \$4,000,000 to \$6,000,000.

## Wages and Living Expenses

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### OF FARMERS, MECHANICS AND LABORERS OF COLORADO IN 1894.

It is to be regretted that the wealth producers of the state, while complaining of the inequitable distribution of wealth, will not furnish the facts necessary to prove that they are unjustly dealt with. Yet such is the case. Out of some fifteen hundred blanks distributed by the agents of this bureau, intended to show the annual income and expenses of the workers of Colorado, but seven have been returned to this office; thus the principal object for which this department has labored during the past year has been defeated by the indifference of the workers for whose benefit the bureau was created. The persons employed in the distribution of the blanks were instructed to give none to any but those who would promise to faithfully fill them out and return them to this office when completed. The bureau was not supplied with sufficient funds to send out agents from time to time to ascertain by a canvass whether or not these promises were being kept, but frequent use was made of the daily papers, urgent appeals were made to the farmers and mechanics to send in their reports, with the result as above stated. This manifest indifference arises from a want of appreciation of the benefits conferred by a bureau of

statistics where the people willingly furnish the information without which it cannot be effective. This apathy, time and the persistent efforts of the officers of the bureau will, it is hoped, be able to overcome.

## Collection of Wages.

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The assistance of this office was requested by 719 persons in 1893 to aid them in the collection of \$22,273.62 in wages. And in the ten months ended November 30, 1894, 466 persons to whom \$14,296.90 was due, made application for like assistance.

The part taken by the deputy commissioner in these matters was that of an arbitrator. Letters were written to the debtors making a statement of the creditor's claim and requesting if the claim was correct, the amount claimed to be placed in the hands of the commissioner for the use of the claimant. The hope was also expressed that settlement might be made without the trouble and expense involved in a suit at law. Failing to secure payment in this way, the claim was sent to attorneys for collection.

As a result, much expensive litigation and bitter feeling have been avoided, and many small creditors have secured their claims without cost. If a small sum of money were placed at the disposal of this bureau for use in the prosecution of cases of aggravated injustice, where the creditor was unable by reason of his poverty to meet the expenses of a suit, it would be of benefit to workmen and tend to suppress the petty frauds so often perpetrated upon the defenseless poor.

## A Comparison.

In his ninth annual report, the commissioner of labor of the state of Michigan gives a list of 136 industries and occupations in which women were engaged. As a matter of comparison for female workers of Colorado, the following statistics from that report are herewith submitted:

### DETROIT.

INDUSTRIES AND OCCUPATION.	AVERAGE WAGE INCOME.						YEARLY EXPENSE.	
	Number Reporting.	Daily.	Number Reporting.	Weekly	Number Reporting.	Yearly.	Number Reporting.	Out of Wages.
<b>BOOT AND SHOE FAC-</b>								
<b>TORY—</b>								
Helper .....	---	-----	3	\$ 3 67	3	\$ 174	3	\$ 174
Operator .....	1	\$ 1 00	5	7 20	5	338	5	284
Shoe fitter .....	9	1 22	259	6 60	255	251	255	241
Table girl .....	13	57	70	3 12	67	150	67	148
Sock liner .....	---	-----	27	5 10	27	232	27	232
General cutter .....	1	1 00	8	5 31	8	249	8	242
Cutter's help .....	1	1 00	4	6 25	4	284	4	284
Sweeper .....	---	-----	2	6 00	2	300	2	300
Stamper .....	1	1 00	4	6 00	4	276	4	266
Box makers .....	30	42	30	2 53	30	125	30	125
Box makers .....	100	51	116	2 74	116	144	116	140
<b>BINDERY—</b>								
Folder .....	10	62	10	3 70	10	181	10	181
Folder .....	9	64	9	3 89	9	191	9	185
Machine feeder .....	3	39	3	2 34	3	114	3	114
Stitcher .....	3	67	3	4 00	3	196	3	190
Feeder .....	3	44	3	2 67	3	135	3	135

## DETROIT—Continued.

INDUSTRIES AND OCCUPATION.	AVERAGE WAGE INCOME.						YEARLY EXPENSE.	
	Number Reporting.	Daily.	Number Reporting.	Weekly	Number Reporting.	Yearly.	Number Reporting.	Out of Wages.
Forelady .....	1	\$ 1 17	1	\$ 7 00	1	\$ 357	1	\$ 307
General binder .....	1	67	1	4 00	1	200	1	200
Machine folder .....	2	75	2	4 50	3	225	3	212
Stitcher .....	3	67	3	4 00	3	196	3	196
Sewer .....	3	78	3	4 67	3	233	3	233
Tipper and folder .....	5	69	5	4 10	5	201	5	197
Tipper .....	1	92	1	5 50	1	269	1	269
CIGAR AND TOBACCO FACTORY—								
Bunch maker .....	68	1 25	68	7 50	68	350	68	335
Labelers .....	12	67	19	3 61	18	168	18	167
Packers .....	25	1 53	25	9 16	25	444	25	410
Strippers .....	37	70	39	4 14	39	198	39	196
Strippers .....	30	40	30	2 42	28	118	28	118
Strippers .....	34	46	55	2 80	51	130	51	126
Strippers .....	24	47	25	2 80	24	130	24	130
Strippers .....	24	50	25	2 97	23	146	23	146
Cigar makers .....	45	1 44	46	8 35	46	411	46	385
Cigar makers .....	29	96	31	5 45	30	260	30	251
Cigar makers .....	11	1 72	11	10 34	11	518	11	386
Sorter .....	1	75	1	4 50	1	216	1	216
Packers .....	26	1 02	26	6 37	24	101	24	79
Packers .....	1	2 00	1	12 00	1	588	1	304
CANDY FACTORY—								
Maker of creams .....	---	---	18	4 89	18	250	18	246
Maker of creams .....	2	63	2	3 75	2	181	2	181
Packer .....	---	---	29	5 03	29	263	29	263
Packer .....	2	59	2	3 50	2	175	2	175
Wrapper .....	---	---	2	6 50	2	335	2	335
Dipper .....	5	59	5	3 50	5	178	5	178
Candy maker .....	2	69	2	4 25	2	201	2	201

## DETROIT—Continued.

INDUSTRIES AND OCCUPATION.	AVERAGE WAGE INCOME.						YEARLY EXPENSE.	
	Number Reporting.	Daily.	Number Reporting.	Weekly	Number Reporting.	Yearly.	Number Reporting.	Out of Wages.
Candy Maker.....	3	75	3	\$ 4 50	3	\$ 234	3	\$ 234
CLOTHIER—								
Button Sewer.....	4	64	4	3 87	4	186	4	178
Button Sewer.....	2	56	2	3 37	2	175	2	154
Buttonhole Maker...	4	67	4	4 00	4	192	4	187
Coat Maker.....	12	82	12	4 96	12	250	12	237
Machine Operator...	8	81	8	4 88	8	236	8	230
Tailorress .....	5	99	5	5 90	5	285	5	253
Vest Maker .....	2	92	2	5 50	2	272	2	272
Pants Maker.....	—	—	4	4 50	2	226	2	226
Shirt Maker.....	—	—	2	6 50	2	321	2	321
Trimmer .....	—	—	1	3 00	1	144	1	144
Examiner.....	1	71	1	4 25	1	204	1	174
Finisher.....	2	83	2	5 00	2	147	2	147
Hand Finisher.....	1	83	1	5 00	1	260	1	230
DRY GOODS—								
Cash Girl.....	—	—	3	1 58	3	53	3	53
Clerk Underwear...	—	—	1	5 00	1	40	1	40
Millinery .....	—	—	1	5 00	1	200	1	200
Infant Dep't..	—	—	2	5 75	2	268	2	268
Mailing .....	—	—	1	1 75	1	87	1	87
Forelady .....	—	—	1	12 00	1	612	1	612
Forelady .....	—	—	1	7 00	1	336	1	321
Parcel Wrapper.....	—	—	1	2 50	1	122	1	122
Saleslady Boys Dep't.	—	—	1	6 00	1	276	1	276
General Saleslady....	—	—	1	5 00	1	255	1	255
Saleslady Millinery..	—	—	1	7 00	1	287	1	287
Trimming Dep't	—	—	1	6 00	1	300	1	260
Clerk General.....	—	—	1	15 00	1	750	1	600
Underwear.....	—	—	1	6 00	1	300	1	300
Cloak.....	—	—	3	11 67	3	600	3	508

## DETROIT—Continued.

INDUSTRIES AND OCCUPATION.	AVERAGE WAGE INCOME.						YEARLY EXPENSE.	
	Number Reporting.	Daily.	Number Reporting.	Weekly	Number Reporting.	Yearly.	Number Reporting.	Out of Wages.
Saleslady .....	---	---	1	\$ 5 00	1	\$ 245	1	\$ 225
"    Gloves .....	---	---	1	6 00	1	294	1	294
Clerk .....	---	---	12	5 83	12	254	12	247
"    (Office) .....	---	---	1	5 00	1	250	1	250
Seamstress .....	---	---	1	5 00	1	130	1	130
Stenographer .....	---	---	1	6 00	1	272	2	247
LAUNDRY—								
Ironer .....	2	83	2	5 00	2	250	2	197
"    .....	3	1 11	3	6 67	3	302	3	267
"    .....	2	92	2	5 50	2	248	2	219
Marker .....	1	83	1	5 00	1	250	1	200
"    .....	5	67	5	4 00	5	186	5	186
Washer .....	2	1 00	2	6 00	2	282	2	282
"    .....	14	90	14	5 40	14	341	14	210
Finishers .....	2	1 08	2	6 50	2	299	2	236
"    .....	1	83	1	5 00	1	250	1	250
Clerk .....	1	83	1	5 00	1	250	1	250
"    .....	1	1 00	1	6 00	1	288	1	258
Starcher .....	2	92	2	5 50	2	275	2	275
"    .....	9	1 04	10	5 70	9	274	9	254
Roller .....	10	34	10	2 05	10	89	10	89
Sorter .....	1	1 00	1	6 00	1	276	1	234
Repairer .....	2	83	2	5 00	2	240	2	228
Taker of Orders .....	1	75	1	4 50	1	198	1	180
Shirt, Cloak and Dress- maker .....	1	1 50	10	4 50	8	201	8	201
Dress Trimmer .....	---	---	1	7 50	1	300	1	300
Cloak Maker .....	---	---	1	8 00	1	352	1	352
Forelady .....	---	---	1	12 00	1	528	1	478
Dress Maker .....	1	100	1	6 00	1	288	1	288
Telephone Girl .....	1	69	113	4 48	113	222	113	190
Typewriter .....	---	---	1	13 72	1	700	1	400



## DETROIT—Concluded.

INDUSTRIES AND OCCUPATION.	AVERAGE WAGE INCOME.						YEARLY EXPENSE.	
	Number Reporting.	Daily.	Number Reporting.	Weekly	Number Reporting.	Yearly.	Number Reporting.	Out of Wages.
<b>JUNK SHOP—</b>								
Sorter .....	119	\$ 0 61	119	\$ 3 64	119	\$ 162	119	\$ 162
Nurse girl.....	2	79	7	1 93	7	96	7	89
Housework .....	49	50	131	2 72	131	134	131	121

## FINAL SUMMARY.

Detroit .....	4,535	\$ 75	5,437	\$ 4 65	5,324	\$ 219	5,306	\$ 208
Grand Rapids .....	250	93	1,234	5 69	1,039	265	1,031	251
Saginaw .....	92	79	1,253	4 64	1,374	216	1,216	197
Bay City .....	1,190	72	1,418	4 33	1,424	202	1,433	195
Jackson .....	681	86	783	5 45	778	259	778	243
Muskegon .....	105	93	360	5 07	373	293	364	281
Lansing .....	39	73	293	5 16	309	191	309	187
Ypsilanti .....	220	83	378	4 97	372	240	372	240
Owosso .....	27	78	92	4 62	94	187	94	117
Pontiac .....	86	1 02	86	6 26	86	263	86	241
Rochester .....	39	67	38	4 10	38	135	38	131
Belden .....	350	77	351	4 65	301	211	299	199
Three Oaks .....	166	66	167	4 24	165	209	165	202
Wyandotte .....	61	59	62	3 52	62	142	62	141
Final State Summary .....	---	79	---	4 81	---	216	---	202

Total number canvassed, 13,139.

7,161 report as working 10 hours per diem.

2,164 " " 9 to 9½ hours per diem.

1,007 " " 8 to 8½ hours per diem.

401 " " 3 to 7½ hours per diem.

644 " " 10½ to 12 hours per diem.

317 " " 12½ to 14½ hours per diem.

118 " " 15 hours per diem.

8 " " 16 hours per diem.

8 " " 17 hours per diem.

1 " " 18½ hours per diem.

## HEALTH.

10,215 report health good.  
 1,998 " " fair.  
 889 " " bad.  
 146 report accidents during the year.

## NATIVITY.

3,724 born in Michigan.  
 3,818 " other States.  
 4,341 " foreign lands.  
 Of the foreign born—  
 1,568 were born in Canada.  
 1,426 " " Germany.  
 631 " " Poland.  
 212 " " Ireland.  
 132 " " Norway or Sweden.  
 372 " " other countries.

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8,336 report both parents living.  
 3,433 report father dead.  
 2,361 report mother dead.  
 1,061 report both father and mother dead.

---

10,641 were single.  
 444 were married.  
 490 were widows.

---

337 under 15 years of age.  
 1,585 " 16 " "  
 1,271 " 17 " "  
 1,629 " 18 " "  
 1,143 " 19 " "  
 1,353 " 20 " "  
 1,887 " 22 " "  
 2,156 " 26 " "  
 678 " 30 " "  
 555 " 35 " "  
 434 " 40 " "  
 169 " 44 " "  
 96 " 50 " "  
 38 " 58 " "  
 3 " 59 " "

And one each, 60, 62, 63, 64, 69, 70 and 75.

9,108 lived at home.

28 lived at boarding houses.

1,066 lived in lodging houses.

919 lived with private families.

730 lived with relatives.

---

157 reported impure air where they worked.

374 reported impure water where they worked.

384 reported offensive odors where they worked.

## LOST TIME.

NUMBER PERSONS	DAYS	TOTAL WEEKS	NUMBER PERSONS	WEEKS	TOTAL WEEKS	NUMBER PERSONS	WEEKS	TOTAL
7	1.0	1.0	113	7	791	83	28	2,324
14	2.0	5.0	1,147	8	9,176	1	29	29
1	2.5	0.5	47	9	423	4	30	120
31	3.0	15.5	141	10	410	2	31	62
21	4.0	14.0	6	11	66	10	32	320
11	5.0	9.0	406	12	4,872	3	34	102
1	6.0	1.0	17	13	221	1	36	36
4	7.0	5.0	13	14	182	1	39	39
1	8.0	1.0	21	15	305	1	40	40
3	9.0	4.5	89	16	1,424	1	41	41
9	10.0	15.0	39	17	663	2	44	88
2	12.0	4.0	38	18	684	1	46	46
1	23.0	3.5	1	19	19	2	47	94
1	25.0	4.0	63	20	1,260	1	48	48
502	WEEKS. 1.0	502.0	4	21	84	54	26	1,404
3	1.5	4.5	9	22	198	----	----	----
1,954	2.0	3,908.0	2	23	46	----	----	----
667	3.0	2,001.0	46	24	1,104	----	----	----
1,950	4.0	7,800.0	7	25	175	----	----	----
256	5.0	1,280.0	80	26	2,080	----	----	----
650	6.0	3,900.0	7	27	189	----	----	----
6,089	----	19,470.0	2,296	----	25,372	167	----	4,793

From the foregoing table it is seen that 8,552 persons lost 49,635 weeks, which at the average rate of wages per week (\$4.81) amounts to \$238,744.35, or 11 per cent. of the possible earnings and 12½ per cent. of actual earnings, which is less than 50 per cent. of the time lost by the male employees of the State.

Four hundred and seventy-eight report they own homes incumbered with mortgages amounting to \$23,028. 1,527 report as owning personal property mortgaged to secure the payment of \$31,674.

## RENTS.

NUMBER REPORTING.	PER WEEK.	NUMBER REPORTING.	ROOMS PAID FOR.
31	\$ 50	3,030	1
24	75	210	2
6	87	234	3
424	1 00	437	4
4	1 12	375	5
162	1 25	487	6
298	1 50	359	7
53	1 75	140	8
328	2 00	-----	----
43	2 25	-----	----
249	2 50	-----	----
166	3 00	-----	----
109	5 00	-----	----
28	3 50	-----	----
22	3 75	-----	----
1,947	-----	5,272	----

## AVERAGE WAGES AND EXPENSES IN MICHIGAN.

Average wages in Saginaw, \$434.20.  
Average rent, \$81.84, or 19 per cent. of wages.  
Average lost time, 16 weeks.  
Average working time, 36 weeks.  
Average wages per week actual working time, \$12.07. full time, \$8.35.  
1,854 persons.  
Lost on account of lost time, \$193.12, or 44.5 per cent. of wages.

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Average wages in Grand Rapids, \$549.10.  
Average rent, \$89.30, or 16 per cent. of wages.  
Average lost time, 12 weeks.  
Average working time, 40 weeks.  
Wages per week actual working time, \$13.73; full time, \$10.56.  
Lost on account of lost time, \$164.76, or 30 per cent. of wages.  
1,479 persons.

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Average wages in Detroit, \$577.50.  
Average rent in Detroit, \$106.92, or 18.5 per cent. of wages.  
Average lost time, 10.75 weeks.  
Average working time, 41.25 weeks.  
Average wages per week working time, \$14.00; full time, \$11.10.  
Lost on account of lost time, \$150.50, or 26 per cent. of wages.  
4,979 persons.

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Average wages in eight cities, \$498.33.  
Average rent in eight cities, \$90.90, or 18.2 per cent. of wages.  
Average lost time in eight cities, 13.4 weeks.  
Average work time in eight cities, 38.6 weeks.  
Average wages per week working time, \$12.91; full time, \$9.58.  
Lost on account of lost time, \$173.00, or 34.7 per cent. of earnings.  
13,757 persons.

The foregoing statistics were compiled from the report of the Labor Commissioner of Michigan for 1893.

## Wages of Farm Labor.

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### RESULTS OF NINE INVESTIGATIONS—FROM 1866 TO 1892.

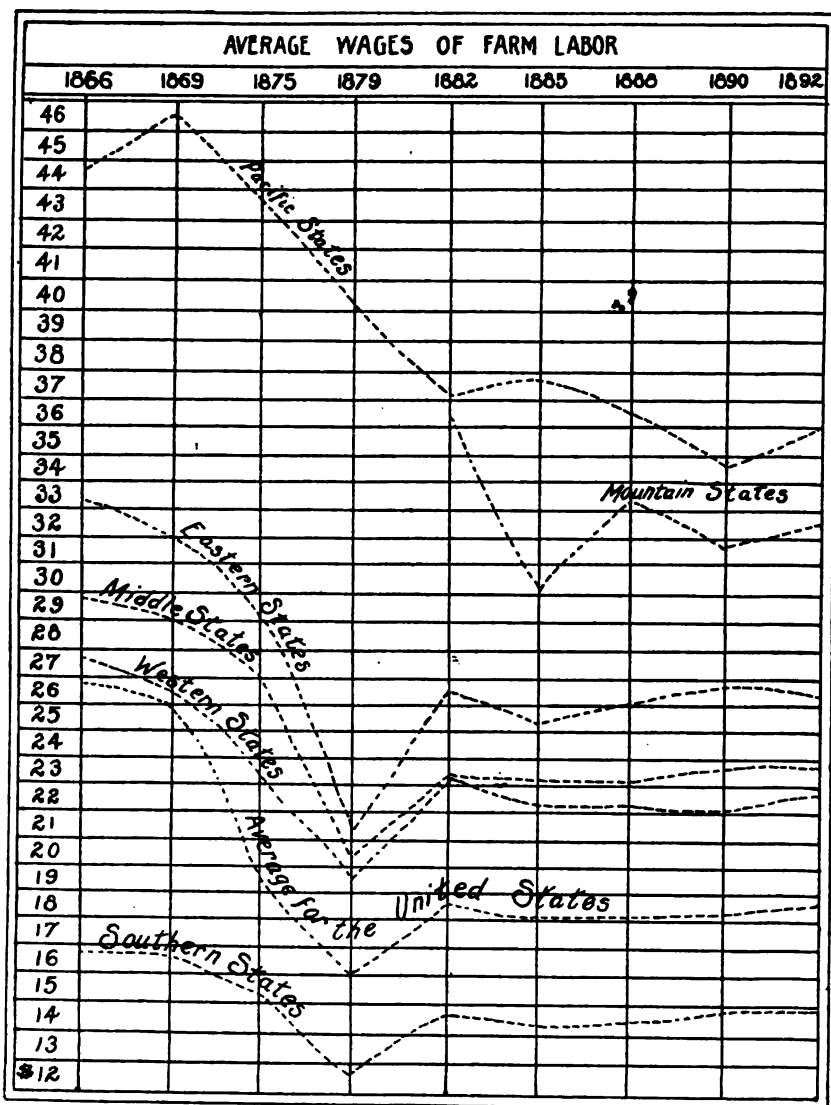
Compiled from Report U. S. Department of Agriculture, 1892.

The investigations of rates of wages for farm labor, nine of which have been made during the past twenty-six years, have been very complete in method and satisfactory in result. Beginning when labor was in demand to repair the wastes of war, the average rates were high, gradually declining, finding lowest level in 1879, then rising to a normal status, which has been maintained with wonderful uniformity during the last ten years.

The most important facts ascertained are those of wages by the month, both with and without board, for the summer season or for the year. In such wages are included a very large proportion of the hired agricultural labor of the country. Of the transient labor employed, the most important is that of the harvest period. This is generally about 40 per cent. higher than transient labor employed for other purposes, and higher also than regular monthly wages in nearly the same proportion. There is a great difference in the relative proportion of transient labor in the several geographical divisions of the country. In the South engagements for the year are the natural and customary rule of labor con-

tracts, and transient labor is only available to a limited extent, and only desirable for excess of cotton-picking or for the trucking and fruit-growing harvest exigencies, which are annually claiming increased importance. On the Atlantic coast market-gardening, orcharding, and berry-picking give increasing prominence to transient rural service. In the wheat-growing regions of the Northwest this class of farm labor assumes the highest importance and dominates the labor situation, as shown in the swelling rates of wages in Minnesota and the Dakotas.





## WAGES PER MONTH BY THE YEAR OR SEASON.

## WAGES WITHOUT BOARD PER MONTH.

States and Territories.	1892	1890	1888	1885	1882	1879	1875	1869	1866
Maine .....	\$24 50	\$25 00	\$24 64	\$23 09	\$24 75	\$18 25	\$25 40	\$26 25	\$27 00
New Hampshire.....	25 00	25 15	24 38	22 80	25 25	19 75	28 57	32 66	32 74
Vermont .....	24 67	24 80	23 25	23 00	23 37	19 00	29 67	32 40	32 84
Massachusetts .....	29 70	30 00	29 50	28 75	30 66	25 00	31 87	35 95	38 94
Rhode Island .....	29 00	29 20	27 75	28 50	27 75	23 00	30 00	32 25	34 40
Connecticut .....	27 38	27 00	27 40	27 67	27 90	23 29	28 25	33 00	34 25
New York .....	24 55	24 45	24 13	24 00	23 63	20 61	27 14	29 28	29 57
New Jersey .....	25 50	25 10	23 33	23 60	24 25	20 22	30 71	32 11	32 27
Pennsylvania .....	23 00	22 80	22 24	22 52	22 88	19 92	25 89	28 68	29 91
Delaware .....	18 75	17 35	18 00	18 33	18 20	17 00	20 33	22 00	24 93
Maryland .....	17 50	17 67	18 48	18 20	16 34	14 00	20 02	21 55	20 36
Virginia .....	15 50	14 21	18 32	13 95	13 90	11 00	14 84	15 28	14 82
North Carolina .....	13 30	12 83	13 41	12 85	12 86	11 19	13 46	12 76	13 46
South Carolina .....	12 50	12 10	12 25	12 00	12 10	10 25	12 84	11 54	12 00
Georgia .....	13 50	13 13	12 60	12 47	12 86	10 73	14 40	14 70	15 51
Florida .....	18 67	19 35	18 00	17 80	16 64	13 80	15 50	16 10	18 00

Alabama.....	13 75	14 00	13 59	13 00	13 15	13 20	13 60	15 19	13 40
Mississippi.....	15 40	15 38	15 03	14 60	15 10	13 31	16 40	17 11	16 72
Louisiana.....	16 35	15 98	15 37	16 05	18 20	16 40	18 40	21 37	20 50
Texas.....	18 75	19 85	19 20	18 87	20 20	18 27	19 50	18 83	19 00
Arkansas.....	17 30	18 40	18 34	17 33	18 50	17 12	20 50	25 25	24 21
Tennessee.....	14 50	14 23	14 00	13 88	13 75	12 73	15 20	16 81	19 00
West Virginia.....	19 50	19 55	18 74	19 00	19 16	16 98	20 75	21 39	25 35
Kentucky.....	17 50	16 85	16 51	16 80	18 20	15 17	18 12	18 84	20 23
Ohio.....	22 63	22 10	22 21	23 00	24 55	20 72	24 05	26 35	28 46
Michigan.....	24 00	24 80	25 20	24 00	25 76	22 88	28 22	31 01	31 26
Indiana.....	22 75	22 25	22 50	22 20	23 14	20 20	24 20	25 42	27 71
Illinois.....	24 25	23 25	23 20	23 50	23 91	20 61	25 20	27 32	28 54
Wisconsin.....	25 25	24 35	24 65	23 54	26 21	21 07	25 50	30 08	30 84
Minnesota.....	26 00	24 60	25 75	25 50	26 36	24 55	26 16	28 61	31 65
Iowa.....	26 20	25 41	25 60	25 33	26 21	22 09	24 35	28 39	28 34
Missouri.....	20 50	20 25	21 00	21 35	22 39	17 59	19 40	24 47	26 75
Kansas.....	24 20	22 75	24 25	24 70	23 85	20 67	23 20	28 96	31 03
Nebraska.....	25 75	25 50	25 59	25 00	24 45	23 04	24 00	33 25	38 37
South Dakota.....	27 00	} 24 75	25 85	25 55	-----	28 56	32 50	-----	30 20
North Dakota.....	30 00		40 00	-----	-----	-----	-----	-----	-----
Montana.....	35 00	36 50	-----	-----	-----	-----	-----	-----	-----
Wyoming.....	34 00	34 00	37 00	-----	-----	-----	-----	-----	-----

## WAGES PER MONTH BY THE YEAR OR SEASON.—Concluded.

## WAGES WITHOUT BOARD PER MONTH.

States and Territories.	1892	1890	1888	1885	1882	1879	1875	1869	1866
Colorado .....	\$33 00	\$33 75	\$36 00	\$33 00	\$36 50	\$35 00	\$38 50	.....	\$67 50
New Mexico. ....	27 67	27 50	28 75	28 75	.....	22 10	22 75	.....	25 00
Arizona .....	33 00	33 00	25 00	.....	.....	.....	.....	.....	.....
Utah .....	33 50	32 30	33 50	30 00	.....	28 87	35 50	.....	44 71
Nevada .....	36 00	35 00	38 00	.....	.....	.....	.....	.....	.....
Idaho .....	35 50	36 25	39 00	.....	.....	.....	.....	.....	.....
Washington. ....	37 50	37 00	35 20	38 33	.....	.....	.....	.....	.....
Oregon .....	34 25	31 60	32 56	34 00	33 50	35 45	38 25	.....	35 75
California .....	36 50	35 50	38 08	38 75	38 25	41 00	44 50	46 38	45 71
Average.....	18 60	18 33	18 24	17 97	18 94	16 42	19 87	25 92	26 87

## WAGES PER MONTH BY THE YEAR OR SEASON.

## WAGES WITH BOARD PER MONTH.

States and Territories.	1892	1890	1888	1885	1882	1879	1875	1869	1866
Maine.....	\$17 00	\$17 50	\$17 20	\$16 00	\$16 15	\$11 08	\$15 94	\$16 50	\$17 44
New Hampshire.....	17 50	17 60	17 00	15 75	16 72	12 30	18 25	22 16	22 48
Vermont.....	17 45	17 35	16 40	16 20	16 00	11 50	19 37	21 40	21 00
Massachusetts.....	18 00	18 50	18 00	17 85	18 25	15 33	20 25	22 16	22 36
Rhode Island.....	17 75	18 00	17 50	17 70	17 00	13 35	19 00	20 00	20 50
Connecticut.....	17 50	17 33	17 17	17 20	17 37	14 23	18 50	20 75	21 54
New York.....	16 50	16 65	16 30	16 52	15 36	13 19	17 80	18 64	19 32
New Jersey.....	16 75	16 00	15 73	14 10	14 20	11 53	16 78	19 02	18 98
Pennsylvania.....	15 00	14 60	14 50	14 12	14 21	11 46	16 10	18 05	18 84
Delaware.....	12 00	11 15	12 25	12 63	12 50	9 50	11 67	13 00	13 25
Maryland.....	11 33	11 25	11 84	11 50	9 89	8 95	11 42	12 00	12 76
Virginia.....	9 67	9 47	9 25	9 34	9 17	7 66	9 21	9 65	9 36
North Carolina.....	8 78	8 80	9 00	8 91	8 80	7 66	8 82	7 91	8 15
South Carolina.....	8 40	8 62	8 00	8 25	8 10	6 66	8 19	7 34	7 66
Georgia.....	9 00	8 37	8 81	8 73	8 70	7 38	8 79	9 70	9 67
Florida.....	12 27	12 59	11 33	11 37	10 20	8 73	10 75	10 91	12 12

## WAGES PER MONTH BY THE YEAR OR SEASON.—Concluded.

## WAGES WITH BOARD PER MONTH.

States and Territories.	1892	1890	1888	1885	1882	1879	1875	1869	1866
Alabama.....	9 17	9 85	9 49	9 10	9 09	8 30	9 40	10 52	9 80
Mississippi.....	10 46	10 50	10 09	10 00	10 09	9 28	11 25	11 21	11 58
Louisiana.....	11 83	11 79	11 12	11 26	12 69	11 27	12 20	12 62	12 42
Texas.....	13 00	13 30	12 60	13 72	14 03	11 49	13 37	13 21	12 72
Arkansas.....	11 50	12 55	12 50	12 25	12 25	11 31	13 00	16 60	15 80
Tennessee.....	10 20	10 12	10 00	9 74	9 49	8 69	10 00	11 00	12 58
West Virginia.....	12 75	12 95	12 25	12 40	12 46	10 94	13 10	13 87	16 47
Kentucky.....	12 40	11 70	11 33	11 69	11 75	10 00	12 00	12 57	13 65
Ohio.....	15 60	15 10	15 00	15 50	16 30	13 34	16 33	16 74	18 96
Michigan.....	16 00	16 75	17 00	16 14	17 27	14 64	18 46	20 03	20 48
Indiana.....	15 00	14 78	15 30	15 30	15 65	12 76	16 14	17 03	18 72
Illinois.....	16 50	16 35	16 00	16 60	17 14	13 01	16 87	17 69	18 72
Wisconsin.....	17 00	16 75	16 80	16 78	17 90	13 81	16 45	18 47	19 87
Minnesota.....	17 60	16 60	17 68	16 75	17 75	5 62	16 36	17 94	21 10
Iowa.....	17 75	17 00	17 34	17 00	17 95	13 90	16 11	17 87	18 87
Missouri.....	14 20	14 00	14 20	14 50	13 95	11 84	13 15	16 38	18 08

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Kansas.....	16 20	15 05	16 05	16 00	15 87	13 28	14 65	18 38	19 81
Nebraska.....	16 80	16 60	17 18	16 50	16 20	14 86	14 75	19 18	24 64
South Dakota.....	18 25	{ 17 10	18 21	17 60	-----	16 57	20 50	-----	20 00
North Dakota.....	21 00		27 50	-----	-----	-----	-----	-----	-----
Montana.....	23 50	23 80	27 50	-----	-----	-----	-----	-----	-----
Wyoming.....	23 00	23 00	25 00	-----	-----	-----	-----	-----	-----
Colorado.....	\$22 00	\$21 00	\$23 00	\$21 25	\$27 08	\$20 00	\$21 14	-----	\$42 12
New Mexico.....	17 85	17 83	18 25	17 50	-----	13 80	14 25	-----	16 50
Arizona.....	22 00	21 50	16 00	-----	-----	-----	-----	-----	-----
Utah.....	22 30	21 00	22 30	21 00	-----	20 50	25 33	-----	26 32
Nevada.....	24 00	23 00	27 00	-----	-----	-----	-----	-----	-----
Idaho.....	23 50	23 50	26 25	-----	-----	-----	-----	-----	-----
Washington.....	25 00	24 40	25 00	26 25	-----	-----	-----	-----	-----
Oregon.....	23 00	22 00	23 00	21 25	24 75	23 86	25 67	-----	22 53
California.....	24 50	22 40	25 67	25 00	23 45	26 27	28 60	\$28 69	30 35
Average.....	\$12 54	\$12 45	\$12 36	\$12 34	\$12 41	\$10 43	\$12 72	\$16 55	\$17 45

These are the results of nine investigations, at different dates, from 1866 to 1892. They are made by our county correspondents, and also during the past ten years by the correspondents of our state agents, the two results revised and harmonized in this office. While changes occur from one date of investigation to another, they are in accord with controlling conditions and circumstances, and are very slight in recent years, in which the causes of change are only mildly operative. Where changes occur the causes are usually apparent.

## DAY WAGES IN HARVEST.

## WAGES WITH BOARD.

States and Territories.	1892	1890	1888	1885	1882	1879	1875	1869	1866
Maine.....	\$1 32	\$1 35	\$1 30	\$1 19	\$1 22	\$1 09	\$1 49	\$1 65	\$1 56
New Hampshire.....	1 29	1 38	1 37	1 32	1 35	96	1 64	1 95	1 52
Vermont.....	1 33	1 37	1 35	1 30	1 35	97	1 85	2 00	1 85
Massachusetts.....	1 30	1 38	1 38	1 31	1 35	1 00	1 50	1 95	1 92
Rhode Island.....	1 28	1 35	1 35	1 25	1 30	95	1 50	1 75	1 71
Connecticut.....	1 38	1 38	1 40	1 33	1 33	1 25	1 53	1 90	1 90
New York.....	1 40	1 38	1 37	1 54	1 47	1 18	1 75	1 99	1 92
New Jersey.....	1 42	1 46	1 50	1 65	1 74	1 30	2 03	2 09	2 38
Pennsylvania.....	1 20	1 18	1 13	1 20	1 30	99	1 51	1 73	1 80
Delaware.....	85	95	1 10	1 52	1 25	1 00	1 41	1 50	1 61
Maryland.....	1 04	1 00	1 15	1 38	1 15	1 12	1 34	1 67	1 68
Virginia.....	1 02	1 00	1 10	1 06	99	96	1 21	1 13	1 21
North Carolina.....	82	80	75	82	85	76	1 00	1 04	1 17
South Carolina.....	75	78	72	64	78	68	1 01	90	93
Georgia.....	76	81	77	80	80	61	99	90	1 06
Florida.....	85	80	78	70	80	73	72	87	83



Alabama.....	76	75	72	76	80	77	1 15	95	1 04
Mississippi.....	70	75	73	79	95	85	1 00	1 27	1 14
Louisiana.....	82	81	72	75	85	77	1 05	1 13	1 20
Texas.....	90	93	96	1 04	1 08	94	1 20	1 26	1 32
Arkansas.....	84	93	97	1 03	1 02	1 08	1 25	1 40	1 52
Tennessee.....	93	91	93	1 04	1 00	98	1 20	1 59	1 54
West Virginia.....	1 00	1 00	92	1 03	1 00	95	1 20	1 29	1 31
Kentucky.....	1 10	1 15	1 07	1 17	1 18	1 15	1 46	1 38	1 70
Ohio.....	1 24	1 20	1 23	1 40	1 41	1 17	1 60	1 72	1 73
Michigan.....	1 40	1 39	1 40	1 57	1 76	1 55	2 00	2 25	2 14
Indiana.....	1 28	1 25	1 32	1 55	1 58	1 28	1 75	1 77	1 76
Illinois.....	1 30	1 27	1 25	1 40	1 54	1 18	1 83	1 94	1 91
Wisconsin.....	1 38	1 30	1 44	1 57	2 10	1 70	1 92	1 96	2 15
Minnesota.....	1 70	1 51	1 75	1 89	2 16	2 25	2 30	2 36	2 27
Iowa.....	1 40	1 50	1 46	1 61	1 81	1 57	2 10	2 24	1 88
Missouri.....	1 05	1 10	1 13	1 30	1 23	1 17	1 43	1 84	1 72
Kansas.....	1 28	1 13	1 25	1 48	1 35	1 32	1 46	1 63	1 82
Nebraska.....	1 27	1 27	1 42	1 55	1 57	1 66	1 98	2 00	2 15
South Dakota.....	1 60	} 1 52	1 64	1 00	2 19	---	1 90	---	2 00
North Dakota.....	1 70		1 50	---	---	---	---	---	---
Montana.....	1 65	1 50	1 50	---	---	---	---	---	---
Wyoming.....	1 55	1 30	1 30	---	---	---	---	---	---

## WAGES IN HARVEST—Concluded.

## WAGES WITH BOARD.

States and Territories.	1892	1890	1888	1885	1882	1879	1875	1869	1866
Colorado.....	\$ 1 37	\$ 1 21	\$ 1 35	\$ 1 50	\$ 1 80	\$ 1 55	\$ 1 50	---	\$ 2 87
New Mexico.....	1 05	95	1 00	88	1 40	67	90	---	1 12
Arizona.....	1 25	1 25	1 20	---	---	---	---	---	---
Utah.....	1 43	1 27	1 30	1 36	1 56	1 43	1 75	---	2 49
Nevada.....	1 63	1 70	1 37	---	---	---	---	---	---
Idaho.....	1 55	1 50	1 52	---	---	---	---	---	---
Washington.....	1 67	1 67	1 60	1 50	---	1 61	2 00	---	2 25
Oregon.....	1 55	1 45	1 45	1 50	1 50	1 54	1 72	---	1 80
California.....	1 70	1 75	1 85	1 80	1 86	1 76	2 00	2 04	2 06
Average.....	\$ 1 02	\$ 1 02	\$ 1 02	\$ 1 10	\$ 1 15	\$ 1 00	\$ 1 35	\$ 1 74	\$ 1 74

The difference between the rates with and without board is less in harvest wages than in wages by the year. The exigency is pressing and the inconvenience of boarding is less considered. The present rate with board is less than the rate without board by 22 per cent, but in the record of monthly wages it is 33 per cent.

## Wages in Earlier Years.

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The first of the series of official investigations into the local rates of wages paid for agricultural labor was in 1866. Similar detailed and complete data for the whole country are not available for any earlier date but there are, of course, local records in existence in many districts, kept generally by farmers, more careful and methodical in their business matters than the majority of those engaged in that occupation, which, when taken together, will throw a considerable light upon the rates paid for farm labor in earlier years.

With a view to bringing out these local records as far as possible, and consolidating scattered data into an authoritative statement, correspondents were requested to secure and forward records or copies of any records relating to rates of wages current for farm labor for any year or period of years prior to 1865. This request has resulted in the gathering together of fragmentary records and local data, which before were unavailable or in themselves insufficient for use in any comparisons, and their consolidation and presentation in a form which makes them valuable for reference, comparison, or analysis.

It is not to be expected that material gathered in this manner from all sections of the country, representing all branches of rural labor, made up of fragments, of value only when properly fitted into a whole, can be complete and harmonious in all its

parts. Its parts may fit and blend with wonderful accuracy, but there must be points at which the harmony of proportion is disturbed. There are good reasons why there should be greater local variations in rates paid for the same services in different districts during the period under consideration than appear now or in recent investigations. In early days, when population was scattered and the means of intercommunication less efficient than now, there might easily be a surplus of certain kinds of labor in one section and a deficiency in another, giving in old records a high rate in one place and a low one in another not far distant.

The results of the inquiry as to old records have been tabulated as far as possible and will be presented by states or contiguous districts. Naturally such records are comparatively numerous in New England and cover a long period of time. That section was settled by a careful, methodical people, alive to the necessity of keeping an accurate record in detail of their business transactions. In Maine transient wages, during the years between 1840 and 1860, ranged at about 50 cents per day, though in some districts there was a tendency to advance toward the close of the period. Wages by the month with board ranged from \$10 to \$13, with a similar tendency toward a rise. The outbreak of the war, draining the country of its surplus of labor naturally caused a sharp advance in wages in Maine, as in all other sections, but before this time an increase had begun, the result of a gradual changing of industrial conditions. The establishment of manufactures gradually drew labor from the farm, and in districts where the diversification of labor was most marked monthly wages had risen to about \$20 before 1860. With this rise the employment of improved machinery became more general, and labor has become much more effective than when lower wages ruled. The difference in conditions surrounding labor may be appreciated from the remark of a New Hampshire correspondent

that, in 1841, "50 cents was paid for a day's work, which consisted of going to the fields as soon as it was light and working until 9 o'clock at night," while a Massachusetts correspondent worked one year in 1852 for \$100 and a suit of clothes, and paid \$300 in 1870 for the same period of service.

From account books belonging to the ancestors of David E. Hoxie, of Leeds, Hampshire county, Mass., the following statement, showing actual wages paid at different dates during the years 1840 to 1862 for various classes of farm labor, is taken:

Years.		With board.	Without board.
1840.....	Five months from June 1 to November, per month	\$13 50	-----
	Eight months from December 1, per month.....	14 50	-----
	January, one month, per month.....	10 00	-----
	April 1 to June 1, per month.....	14 50	-----
	June 8, six months, per month.....	13 50	-----
	January, hand and yoke cattle, per day.....	-----	\$2 00
	Getting out manure, per day.....	75	-----
	July, haying, per day.....	1 00	-----
1841.....	Per year.....	125 00	-----
	December to April, per month.....	11 00	-----
1842.....	April, seven months, per month.....	12 00	-----
	December, one month, per month.....	8 00	-----
	December, eight months, per month.....	14 50	-----
	April to September, five months, per month.....	1 00	-----
	March, per day.....	67	-----
	October, one month, per month.....	10 00	-----
	Eight months, from April 1, per month.....	-----	14 50
	May, hand, one day, per day.....	-----	83
	May, hand, one day per day.....	-----	75
	July, mowing, per day.....	-----	1 00
	Seven months from April 1, per month.....	-----	12 00
	Seven months from April 1, per month.....	-----	10 00
	Four months from December 1, per month.....	-----	10 00
1843.....	September, one month per month.....	9 00	-----
	October, one month, per month.....	5 50	-----
	November, four months, per month.....	8 00	-----
	April, seven months, per month.....	14 50	-----
1844.....	April, eight months, per month.....	12 50	-----
	April, eight months, per month.....	14 50	-----
1845.....	October, digging potatoes, per day.....	-----	67
	April, eight months, per month.....	14 00	-----
	December, four months, per month.....	10 00	-----
1846.....	April, eight months, per month.....	14 50	-----
	April, eight months, per month.....	12 50	-----
1847.....	December, three and a half months, per month...	11 00	-----

Years.		With board.	Without board.
1847.....	April, eight months, per month.....	12 50	-----
	April, four months, per month.....	10 00	-----
1848.....	April, eight months, per month.....	14 50	-----
	April, four months, per month.....	11 00	-----
	April, six months, per month.....	15 00	-----
	December, four months, per month.....	11 00	-----
1854.....	Eight months, from April to December, per mo....	14 50	-----
1855.....	April, eight months, per month.....	14 50	-----
	May, work one day.....	67	-----
	August 1 to September 17, per day.....	75	-----
	September 22 to October 24, per month.....	-----	15 00
	April 16 to December 20, per month.....	15 00	-----
1856.....	Three months, from January 1, per month.....	15 00	-----
	April 21 to December 24, per month.....	15 00	-----
	Three months, per month.....	15 00	-----
	June 23 to August 1, per day.....	1 00	-----
1857.....	April, eight months, per month.....	15 00	-----
	October, one month.....	15 00	-----
	November, four days, per day.....	50	-----
	August, cradling oats, one day.....	-----	1 25
	May, hoeing, one day.....	-----	75
	July, haying, one day.....	-----	1 25
	October, digging potatoes, one day.....	-----	75
	July, seventeen days, haying, per day.....	-----	1 25
	August, twenty days, per month.....	15 00	-----
	Eight months, per month.....	15 50	-----
1858.....	Two months, per day.....	67	-----
	May, planting, per day.....	75	-----
	Haying, per day.....	1 25	-----
	November, fall work, per day.....	67	-----
	April, eight months, per month.....	15 00	-----
	October, six months, per month.....	14 50	-----
1859.....	March, four months, per month.....	12 00	-----
	November, five months' per month.....	16 00	-----
	November, three months, per month.....	13 00	-----

Years.		With board.	Without board.
1859.....	October, four months, per month.....	10 00	.....
1860.....	Eight months, per month.....	10 00	.....
1861.....	From February two months, per month.....	11 00	.....
	March, one month, per month.....	11 00	.....
	April to July, three months, per month.....	14 00	.....
	April to December, seven months, per month.....	15 00	.....
	December, 1861, to April, 1862, three mos., per mo..	14 00	.....
	July, haying, per day.....	1 25	.....
1862.....	From April, seven months, per month.....	15 00	.....
	August, haying, five days, per day.....	1 25	.....



One feature which is common in all records of this class should be pointed out. The figures cannot be accepted as averages, and in some cases they may not even approximate averages. The person employed may be a superior or he may be an inferior workman. An example of this is found in the above statement for the year 1843. During that year wages per month were paid at the rate of \$5.50, \$8 and \$14.50, these figures undoubtedly representing different degrees of efficiency of labor. The difference between the first and the last rates is so great that it is possible that the first represents a hired boy or youth.

A very comprehensive compilation, showing wages paid in some portions of Massachusetts in almost every year from 1752 to 1865, is presented. The figures have in each instance been taken from actual records. They must not be taken as averages for the state in the years to which they refer. Their value is invalidated by the absence of place and circumstances. The figures are furnished by our state agent for Massachusetts and in the main have been taken from the reports of the bureau of labor of that state. The statement referred to is thus given:

## WAGES OF AGRICULTURAL LABORERS.

## MASSACHUSETTS.

Years.	Basis.	Amounts
1752.....	Day.....	\$ 0 33
1753.....	Day.....	37
1754.....	Day.....	33
1755.....	Day.....	36
1756.....	Day.....	33
plowing greensward.....	Day.....	2 00
1757.....	Day.....	32
with oxen.....	Day.....	1 00
1760.....	Day.....	25
1761.....	Day.....	32
1763.....	Day.....	33
with oxen.....	Day.....	2 00
1764.....	Day.....	36
1765, plowing.....	Day.....	1 33
1766.....	Day.....	33
1767.....	Day.....	27
1770.....	Day.....	34
1771.....	Day.....	33
1771, boys.....	Day.....	17
1772.....	Day.....	33
1772, boys.....	Day.....	17
1773.....	Day.....	34
1774.....	Day.....	36
1775.....	Day.....	34
.....	Week.....	1 75
1776.....	Day.....	33
1777.....	Day.....	56
with oxen.....	Day.....	1 50
summer, with board.....	Day.....	50
1781.....	Day.....	42
1782.....	Day.....	44

## WAGES OF AGRICULTURAL LABORERS.

## MASSACHUSETTS—Continued.

Years.	Basis.	Amounts
1783.....	Day.....	\$ 39
1784.....	Day.....	39
1785.....	Day.....	41
1786.....	Day.....	33
1787.....	Day.....	48
1788.....	Day.....	39
1789.....	Day.....	42
1790.....	Day.....	34
1791.....	Day.....	44
1792.....	Day.....	29
1793.....	Day.....	35
1794.....	Day.....	54
1795.....	Day.....	53
1796.....	Day.....	49
1797.....	Day.....	44
1798.....	Day.....	62
1799.....	Day.....	48
1800.....	Day.....	42
1801.....	Day.....	58
1802.....	Day.....	62
1803.....	Day.....	52
1804.....	Day.....	81
1805.....	Day.....	71
1806.....	Day.....	93
1807.....	Day.....	69
1808.....	Day.....	69
1809.....	Day.....	54
1810.....	Day.....	70
1811.....	Day.....	48
1812.....	Day.....	85
1813.....	Day.....	96

## WAGES OF AGRICULTURAL LABORERS.

## MASSACHUSETTS—Continued.

Years.	Basis.	Amounts
1814.....	Day.....	\$ 70
with double team.....	Day.....	3 00
1815.....	Day.....	87
.....	Month.....	13 50
with board.....	Day.....	56
with board and lodging.....	Month.....	8 00
with two meals a day.....	Month.....	10 00
1816.....	Day.....	75
plowing with oxen.....	Day.....	1 50
1817.....	Day.....	83
1818.....	Day.....	1 49
1819.....	Day.....	53
1820.....	Day.....	83
1821.....	Day.....	70
with oxen.....	Day.....	2 00
with oxen; with board.....	Day.....	1 50
with four oxen and plow.....	Day.....	2 04
1822.....	Day.....	0 77
1823.....	Day.....	94
with oxen.....	Day.....	1 50
1825.....	Day.....	74
.....	Month.....	16 50
with board.....	Day.....	58
with two meals a day.....	Month.....	13 50
with board and lodging.....	Month.....	11 00
with oxen.....	Day.....	1 50
1826.....	Day.....	62
1827.....	Day.....	81
shearing sheep.....	Day.....	1 34
1828.....	Day.....	78
1831.....	Day.....	88

## WAGES OF AGRICULTURAL LABORERS.

## MASSACHUSETTS—Continued.

Years.	Basis.	Amounts
1835.....	Day.....	\$ 88
.....	Month.....	16 50
with board.....	Day.....	55
with two meals a day.....	Month.....	13 50
with board and lodging.....	Month.....	11 00
1840, with board.....	Month.....	12 76
without board.....	Month.....	23 00
with board, harvesting.....	Day.....	1 13
with board, transient.....	Day.....	84
without board.....	Day.....	1 00
1841, with board.....	Month.....	13 43
without board.....	Month.....	26 00
with board, harvesting.....	Day.....	1 00
with board, transient.....	Day.....	63
without board.....	Day.....	1 00
1842, with board.....	Month.....	13 81
without board.....	Month.....	26 00
with board.....	Day.....	75
without board.....	Day.....	1 00
1843, with board.....	Month.....	13 27
without board.....	Month.....	26 00
with board, boy.....	Month.....	5 00
with board.....	Day.....	75
without board.....	Day.....	1 00
1844, with board.....	Month.....	13 92
without board.....	Month.....	26 00
with board.....	Day.....	75
without board.....	Day.....	1 00
1845, with board.....	Month.....	14 37
without board.....	Month.....	26 00
with board.....	Day.....	76

## WAGES OF AGRICULTURAL LABORERS.

MASSACHUSETTS—Continued.

Years.	Basis.	Amounts
1845, without board .....	Day.....	\$ 1 00
with board and lodging .....	Month....	11 00
with two meals a day .....	Month....	13 50
1846, with board.....	Month....	14 06
without board .....	Month....	26 00
with board.....	Day.....	75
without board .....	Day.....	1 00
1847, with board.....	Month....	14 43
without board .....	Month....	26 00
with board.....	Day.....	75
without board .....	Day.....	1 00
1848, with board.....	Month....	14 56
without board .....	Month....	26 00
with board.....	Day.....	75
without board .....	Day.....	1 00
1849, with board.....	Month....	14 69
without board .....	Month....	26 00
with board.....	Day.....	75
without board .....	Day.....	1 00
1850, with board.....	Month....	13 71
without board .....	Month....	18 00
with board.....	Day.....	75
without board .....	Day.....	1 00
1851, with board.....	Month....	14 71
with board.....	Day.....	85
with board, harvesting .....	Day.....	1 25
without board .....	Day.....	1 19
1852, with board.....	Month....	14 67
without board .....	Month....	20 00
with board, harvesting .....	Day.....	1 50
without board .....	Day.....	1 00

## WAGES OF AGRICULTURAL LABORERS.

## MASSACHUSETTS—Continued.

Years.	Basis.	Amounts
1853, with board.....	Month...	\$ 16 00
1854, with board.....	Month...	14 67
without board.....	Month...	22 00
without board.....	Day.....	1 00
1855, with board.....	Month...	14 67
without board.....	Month...	22 00
with board.....	Day.....	1 00
without board.....	Day.....	1 50
1856, with board.....	Month...	14 67
without board.....	Month...	22 00
without board.....	Day.....	1 00
1857, with board.....	Month...	14 67
without board.....	Month...	22 00
without board.....	Day.....	1 00
1858, with board.....	Month...	15 96
without board.....	Day.....	1 00
1859, with board.....	Month...	16 21
without board.....	Day.....	1 00
1860, with board.....	Month...	15 10
without board.....	Month...	21 75
with board.....	Day.....	1 00
without board.....	Day.....	99
.....	Week.....	4 28
1861, with board.....	Month...	15 00
without board.....	Month...	20 00
1862, with board.....	Month...	19 14
without board.....	Month...	26 00
without board.....	Day.....	2 00
1863, with board.....	Month...	19 42
without board.....	Day.....	2 38
1864, with board.....	Month...	20 33

# WAGES OF AGRICULTURAL LABORERS.

MASSACHUSETTS—Concluded.

Years.	Basis.	Amounts
1864, without board .....	Month...	\$ 29 00
with board' .....	Day .....	2 00
without board .....	Day .....	2 25
1865, with board .....	Month...	23 18
without board .....	Month...	32 00
with board .....	Day .....	1 10
without board .....	Day .....	1 75



In this statement it will be seen that the highest rates of wages appear to have been reached in 1865 and the lowest during the last fifty years in 1850.

Some additional local details are found in the reports of Massachusetts correspondents, giving rates prevailing at certain dates in different towns. Notes from these reports from three of the principal counties of the state are presented:

Berkshire county—"The best of farm help from 1840 to 1860 were paid from \$12 to \$16 per month, by the year or eight months and good day laborers \$1 per day"—Town of Dalton. "In 1841, farm laborer by the month, \$10 and board; in harvesting, per day, \$1 and board; in 1851, by the month, \$13 to \$15 and board; harvesting, \$1.25 to \$1.50 per day and board; other than harvesting, \$1 per day and board; in 1865, per month, \$20 and board; without board, \$32 per month; other than harvesting, \$2 per day without board; \$1.50 per day with board. These prices I paid to very good help."—Town of Egremont. "My father says that in his early years he followed the occupation of farm laborer and in 1840 he used to receive \$8 per month and board; wages gradually rose as more attention was given to farming, until the war, then a good hand got from \$25 to \$40 per month and board. Now farming is dull and help is mostly of foreign birth and mighty poor stock at that. Our bright young men leave the farm."—Town of Savoy. "In 1840, wages in harvest time, with board, \$1 per day; common hands, 75 cents to 87 cents, without board. From 1840 to 1860 not much advance in wages."—Town of Williamstown.

Hampshire county—"In 1840 first-class help could be obtained for \$12 per month and board, by the year, and for eight months about \$15 per month and board; these prices ruled to 1860. Between 1850 and 1860, for the year, \$14 to \$15 per month and board. Between 1860 and 1865, about \$20. Good day help, \$1; extra ones, \$1.25."—Town of Southampton. "In 1840, \$12 per month and board; 1841,

\$11 per month; 1842, \$12; 1843, \$10; 1844, \$11; 1845, \$11; 1846, \$12; 1847, \$13; 1848, \$14; 1849, \$15; 1850, \$14; 1851, \$15; 1852, \$15; 1853, \$15; 1854, \$15; 1855, \$15; 1856, \$15; 1857, \$15; 1858, \$16; 1859, \$20; 1860, \$19; 1861, \$17; 1862, \$16; 1863, \$24; 1864, \$26; 1865, \$25; board included in every instance. These figures have been taken from our own books and have required much time, but have been made as accurate as possible."—L. W. West, Hadley. "From 1860 to 1864 we employed on my farm two good American men at \$13 per month and board. In 1843 being eleven years old, I worked on a farm where two men were employed for eight months, one at \$11 per month and board and the other at \$12 per month and board; I then thought I was getting good pay when I received \$5 per month with board."—Town of Northampton.

Middlesex county—"From 1847 to 1850, \$16 per month and board, for eight months; 1851, \$18 per month and board for eight months; 1852, \$20 per month and board, for eight months; 1853, the same; 1854, \$22 per month and board, for eight months; 1855 to 1860, average \$22 per month and board, for eight months, the other four months, \$12."—Town of Framingham. "In 1840, \$12 per month with board, by the year; \$14 for eight months; \$1 per day for harvesting; 50 to 75 cents at other times."—Town of Groton. "In 1840, \$13 and \$14 per month, with board, for eight months; 1850 and 1860, \$14 and \$16 per month, with board, for eight months; 1861, \$13 and \$14 per month, with board, for eight months; 1862, \$16 and \$25 per month, with board, for eight months; 1863, \$20 to \$30 per month, with board, for eight months; 1864, \$20 to \$30 per month, with board, for eight months; 1865 to 1867, \$22 to \$30 per month, with board, for eight months."—Town of Hudson. "For a series of years from 1840 we could hire good help for from \$10 to \$15 per month, with board. From 1855 to 1860, good farm laborers could be hired for \$12 to \$15 per month, with board."—City of Lowell and vicinity.

The agent for Rhode Island thus contrasts wages and conditions of labor in 1846 and those now prevailing:

An old record shows American help on a Rhode Island farm in 1846, earning from \$16 to \$18 per month and board from March to November, with hours from sunrise to sunset. This was skilled help competent to work alone and willing to do any kind of work. This class is only obtainable in working foremen to-day, and they work less and command from \$40 to \$50 per month, with rent and fuel. There seems to be no record of any cheap help that were counterparts of the half-informed foreign help of to-day, who, in many instances, refuse to work over ten hours a day.

Our large dairy farms are mostly run by farmers with large families of boys, who do the milking, the help getting around afterwards and leaving before chore time at night. In a record of 1846 we find in Providence county a family of twenty-six strong, healthy boys. There were others like it. To-day a farmer who can boast of five children is a rarity. This, of course, affects the amount of help.

In Connecticut the state agent, as a result of his investigations, states that

From 1850 to 1855 wages by the year were, without board, \$18 to \$20 per month, and with board, \$9 to \$12 per month. For the six summer months, \$12 to \$16 per month, with board. For July, \$24, with board. By the day, with board, during haying season, \$1.25, and at other seasons, 75 cents.

BY THE YEAR, WITHOUT BOARD.

	Per Month.
1860 to 1865.....	\$22 to \$35
1865 to 1870.....	30 to 40
1870 to 1875.....	35 to 40
1875 to 1885.....	30 to 35
1885 to 1890.....	35 to 40

During the period 1870-1875, for eight months, beginning April 1, men received \$25 per month with board, and 1880 to 1885, by the year, they received \$18 to \$25 per month with board.

Our correspondent for Washington county, N. Y. states that he has continuously, since 1840, employed farm laborers, and refers to his own memoranda for the following notes:

FROM—	Per day with board, in harvest.	Per day with board, at common labor in summer.	Per day with board, in winter.
1840 to 1850.....	\$ 75	\$ 55	\$ 45
1850 to 1860.....	1 00	65	50
1860 to 1870.....	1 75	1 37½	1 00
1870 to 1880.....	1 50	1 12½	1 00
1880 to 1890.....	1 50	1 00	75

Without board, 37 1-2 cents per day to be added to the foregoing per diem wages.

Wages by the month for the whole year, with board, have been: From 1840 to 1850, \$10.50; 1850 to 1860, \$11.50; 1860 to 1870, \$19.50; 1870 to 1880, \$20.00; 1880 to 1890, \$18.00.

During the six or seven months of cropping season, wages by the month have been about as follows:

FROM—	With board.	Without board.
1840 to 1850.....	\$14 00	\$ .....
1850 to 1860.....	15 00	.....
1860 to 1870.....	23 00	30 00
1870 to 1880.....	24 00	32 00
1880 to 1890.....	22 00	26 00

Wages varied considerably in each decade, but the foregoing figures compare nearly with my experience, which, I think, is not far different from my neighbors. For a number of years I have paid my main man \$350 per year, find him a good garden, keep his cow, give him house rent, and fuel on the stump, he boarding himself.

During the years following 1840, farm wages in New Jersey averaged about 50 cents per day for ordinary labor and 75 cents for harvesting. Wages by the month amounted to about \$6 to \$8. It was the almost universal rule that laborers were hired with board. Edward Burrough, of Merchantville, Camden county, furnishes the following items taken from the account book of his father, Joseph A. Burrough, of the same county. The original entries are given for the lights they throw upon the conditions surrounding farm labor at that day.

#### WAGES PAID BY JOSEPH A. BURROUGH FOR FARM HELP FROM 1842 TO 1852.

Furnished by Edward Burrough, Merchantville, Camden county, N. J.

1845. Levi Johnson, \$7 per month and board. James Bunn, \$8 per month and board. Israel Garwood, 40 cents per day and board. March, Samuel Martin, \$6.50 per month and board.

1846. Stephen Simmonds, 40 cents per day. January 12, Perry Simmonds, \$6 per month and board. March, Perry Simmonds, \$7 per month and board. April 6, Adam Getsin, \$8.50 per month and board for eight months. Rented small house to Perry Simmonds at \$2.50 per month for as long as he shall work for me at \$9 per month and meals furnished him.

1847. Henry Johnson, at \$7 per month. February 17, Stephen Simmons, at 40 cents per day for a year. May 26, James Prunell, at \$9 per month. Let small house to Perry Simmonds at \$2 per month, to

pay him \$9 per month and he to keep a cow. August, hired William Pate and Samuel Vehnell at \$8 per month for four months.

1848. Rent house to Perry Simmonds at \$2 per month and pay him 50 cents per day for a year, not including wet or bad weather. Carpenter work, \$1.25 per day and board. Hired James Prunell for eight months, three months at \$9 and three months at \$10.50, then three months at \$9. Hired Dennis McSugh for three months at \$6 per month.

1849. Hired Dennis McSugh for one year for \$100. Rented house to William Harris for \$25 per year and pay him 50 cents per day.

1850. Hired Dennis McSugh for one year for \$102. Rented house for \$30 per year; wages, 50 cents per day.

1851. Rent house for \$25 per year; wages, 50 cents per day. March, hired Benjamin Foley for \$8 per month. July, hired Robert Foley for \$7.50 per month.

1852. David Walker at \$7 per month. Rent house at \$25 per year; wages, at 50 cents per day. Peter McSugh at \$9 per month for four months and seven months at \$10 per month.

1853. Rented house at \$30 per year; wages, 50 cents per day. Peter McSugh for one year at \$10 per month.

1854. Hired Enoch Collins at \$9 per month. June, hired four Germans at \$10 per month for one month.

1855. Hired Dennis Morgan at \$6 per month. Rented house to Humphries at \$2 per month; wages, 62 1-2 cents per day, including meals. Hired Daniel Morgan for nine months at \$9 per month.

1856. Rented house for \$25 per year; wages 62 1-2 cents per day. Hired Franklin Dun for nine months for \$100. Hired John Miller for six months for \$12 per month.

1857. Hired Samuel Seers for six months at \$13 per month. Hired George Seers for eight months at \$14 per month. Hired George Fritz for one month at \$10 per month. Rented house for \$30 per year and wages 50 cents per day.

1858. Rented house for \$25 per year and wages 50 cents per day if he keep a cow, if no cow kept, rent of house, \$30. Hired Isaac Davis at \$10 per month.

1859. Hired Isaac Davis for eleven months at \$11 per month. Hired John Harris for eight months at \$11 per month. Rented house for \$25; wages of son, \$10 per month and meals.

1860. Isaac Davis, wages, \$11 per month.

1861. Isaac Davis, wages, \$12 per month.

1862. J. H. Wilson, wages, \$6 to \$7 per month.

1863. Rented house to Isaac Davis free, he to work for me at 50 cents per day. William, one month at \$8.

1864. Hired Isaac Pattern for one month at \$10. Hired Sill at \$8. August; hired Henry at \$15 per month. Rented house to Isaac Davis free; wages, \$4 per week for nine months and \$1 per day for three months.

1865. Hired Hiram Turner for nine months at \$20 per month and board and continued at same rates for three years.

Richard Coles, of Woodstown, Salem county, N. J., furnishes the statement of the rate of wages paid in different classes for labor in that county, from 1840 to 1865.

YEAR.	With board, per month, by the year.	With board, per month, for summer.	With board, per day. Harvest Wages.	With board, per day. Common labor.
1840 .....	\$ 8 00	\$ 10 00	\$ 0 62½	\$ 0 45
1841 .....	8 00	10 00	85	50
1842 .....	8 00	10 00	75	50
1843 .....	8 00	10 00	75	50
1844 .....	8 00	10 00	75	50
1845 .....	10 00	12 00	75	62½
1846 .....	8 00	10 00	75	50
1847 .....	8 50	10 00	75	50
1848 .....	8 50	10 00	75	50
1849 .....	9 00	10 50	1 00	62½
1850 .....	10 00	12 00	1 00	62½
1851 .....	10 00	12 00	1 00 to 1 75	65
1852 .....	10 00	12 00	1 00 to 1 75	65
1853 .....	10 50	12 50	1 25 to 1 75	65
1854 .....	10 50	12 50	1 25 to 1 75	75
1855 .....	11 00	13 00	1 25 to 1 75	75
1856 .....	12 00	15 00	1 50 to 2 20	75
1857 .....	12 50	16 00	1 50 to 2 00	75
1858 .....	12 50	16 00	1 50 to 2 00	1 00
1859 .....	12 50	16 00	1 80 to 2 00	1 00
1860 .....	11 00	13 00	1 80	75
1861 .....	12 00	14 00	1 50	75
1862 .....	12 00	14 00	1 50	87½
1863 .....	15 00	18 00	1 75	1 00
1864 .....	16 00	20 00	1 00	1 25
1865 .....	16 00	20 00	2 00	1 25



Pennsylvania wages ruled somewhat lower than the New Jersey rate. From 1840 to 1845, in some sections the harvest rate was 50 cents per day, ordinary wages, 33 cents. Between 1845 and 1850 there was a gradual rise to 62 1-2 cents for harvest and 50 cents for ordinary. Before 1860 the rate had advanced to 75 cents for harvest, and ordinary in proportion. Mr. W. B. Bishop, of Strasburg, furnishes memoranda relative to wages in Lancaster county, as follows:

Wages with board in Lancaster county, from 1840 to 1849, inclusive, were, by the day, 50 cents; for harvest, \$1; by the year, \$10 per month. From 1850 to 1853, inclusive, by the day, 50 cents; harvest, \$1; by the year, \$11 per month. In 1854, by the day, 50 cents; harvest, \$1.25; by the month, \$11. In 1855, by the day, 62 1-2 cents; harvest, \$1.50; by the month, \$11.50. In 1856 and 1857, by the day, 75 cents; harvest, \$1.50; by the month, \$12. In 1858, by the day, 50 cents; harvest, \$1; by the month, \$12. In 1859 and 1860, by the day, 60 cents; harvest, \$1.25; by the month, \$12. In 1861 and 1862, by the day, 62 1-2 cents; harvest, \$1.25; by the month, \$13. In 1863, by the day, 75 cents; harvest, \$1.50; by the month, \$14. In 1864, by the day, \$1; harvest, \$2; by the month, \$16. In 1865, by the day, \$1; harvest, \$2; by the month, \$20.

Until late years very little farm labor was employed without board. From 1840 to 1849, board was estimated at about 20 cents per day for day labor and about \$4 by the month. Later, to 1863, board for day labor, at about 30 cents per day, by the month, \$6. From 1863, 50 cents for day labor and \$10 by the month.

These figures have been taken from the books of one who was actively engaged in farming during the year specified. They represent the prices paid first-class farm labor, hence the figures given for harvest hand by the month, may be slightly above the general average. Before the advent of reaping ma-

chines, a good reaper could command a little better wages than one who was only able to bind during harvest.

In the South, prior to 1860, there was practically no free farm labor. The great bulk of the work of the fields was performed by slave labor, and when hiring was done the price of the labor was paid to the owner of the slave. Enough hiring was done in this way to set a value upon labor, the same thing as fixing a rate of wages. Where slaves were hired out for the year a contract between the owner and the person hiring was entered into, setting forth the obligations of the parties. Sometimes this contract was in the form of a note agreeing at a specified date to pay a definite sum, in addition to other obligations for food, clothing, etc. The correspondent of the Department for Cabarrus county, N. C., submits one of these contracts in the form of a note, which is given, names only being omitted:

Twelve months after date we promise to pay \_\_\_\_\_, trustee to \_\_\_\_\_, or order, five hundred dollars for the hire of negro girl Minnie. We also promise to furnish said girl with three suits of clothes, two pairs shoes and stockings, one blanket or quilt, and bonnet, and pay all her taxes, State and Confederate, for the year 1865, and return said girl at Concord, at the end of the year, unavoidable accidents excepted.

Witness our hands and seals January 1, 1865.

The promise is to pay in Confederate currency, and the enormous discount at which it stood at that date explains the apparently high cost of the labor. Prior to 1860, a year's labor of a negro man was worth about \$100 in Virginia and the Carolinas. This, of course, included not only board, but some clothing, shelter and bedding as well. Women generally, for field labor, were worth about \$45. In the cotton fields of the Gulf states, and in the sugar districts of Louisiana, labor was more productive, and

the rate of hire for slaves higher. The rate for able-bodied men was about \$125 per annum; and for women, for field work, from \$75 to \$100.

Wages in Ohio in the years following 1840 ranged very much the same as already reported in other districts of free labor. Transient service outside of harvest cost about 50 cents, while harvesting was paid for at the rate of 75 cents per day. There was a gradual increase until the breaking out of the war, when there was a sharp rise consequent upon the withdrawal of large numbers of able-bodied men from productive industry. The high rates reached during the war period have been nearly if not quite maintained.

Mr. Paul Oliver, of Perryville, Ashland county, furnishes a statement relative to wages and labor conditions between 1840 and 1865, as follows:

From 1840 to 1850 farm laborers hired by the year received \$16 per month without board, and \$12 with board. Wages per day for transient service in harvest were 75 cents without board and 62 1-2 cents with board. Per day, at other seasons, 50 cents with board, 62 1-2 cents without.

From 1850 to 1862, by the year, \$18 per month, without board, and \$14 with board. Per day, for transient service in harvest, 90 cents without board, and 75 cents with board. In other seasons, laborers received 62 1-2 cents per day with board, and 75 cents without board.

From 1862 to 1865, when hired by the year, laborers received \$26 per month without board, and \$20 with board. For transient service in harvest, \$1.50 per day without board, and \$1.25 with board. During other than harvesting, transient laborers received \$1 per day with board, and \$1.25 without board.

From 1840 to 1850 labor and wages remained very uniform. As the energetic young men grew up and pushed West for homes, the younger ones, with

a sprinkling from the flow of foreign immigration, supplied their places. The rush to the California gold mines in 1849 and early fifties, unsettled wages a trifle, but the call for laborers to gather in the harvests was responded to by the villagers in every neighborhood, and the women in many cases came cheerfully to the fields and performed the work of men. The war, with its drain upon the young and vigorous men, unsettled wages and advanced the price of labor to correspond with the scale of all other commodities.

Mr. Joseph Allen, of Gano, Butler county, O., furnishes a record which he has kept since he began to work for wages by the month, in 1836. In that year and in 1837 he worked nine months of each year for \$45. The record is presented in tabular form and in detail:

Years.	Monthly wages.	Day laborer's wages.	Female help wages per week.	Harvest wages per day.
1836.....	\$6 to \$8	\$ 25 to \$ 50	\$ 50 to \$ 75	\$ 40 to \$ 50
1837.....	6 8	25 50	50 75	.... 50
1838.....	8 10	40 50	50 75	.... 50
1839.....	12 20	50 75	75 1 00	75 1 00
1840.....	10 12	25 50	50 75	.... 75
1841.....	9 10	35 50	.... 75	.... 50
1842.....	8 9	35 40	.... 75	.....
1843.....	8 9	.... 50	75 1 00	.....
1844.....	10 11	.... 50	75 1 00	.....
1845.....	10 12	50 62	75 1 00	.....
1846.....	10 12	50 62	75 1 00	.....
1847.....	10 12	50 75	1 00 1 25	.....
1848.....	10 12	50 75	1 00 1 25	.....
1849.....	10 13	50 62	1 00 1 25	.... 75
1850.....	10 13	50 62	1 00 1 25	.... 75
1851.....	11 13	50 62	1 00 1 25	1 00 1 25
1852.....	11 13	50 62	1 25 1 50	1 00 1 25
1853.....	11 13	50 75	1 25 1 50	1 00 1 25
1854.....	12 13	50 75	1 25 1 50	1 25 1 50
1855.....	12 14	50 75	1 25 1 50	1 25 1 50
1856.....	13 15	50 75	1 50 2 00	1 50 1 75
1857.....	14 16	62 75	1 50 2 00	1 50 2 00
1858.....	14 16	62 75	1 50 2 00	1 50 2 00
1859.....	13 15	50 75	1 25 1 50	1 50 2 00
1860.....	13 15	.... 75	1 25 1 50	1 75 2 00
1861.....	13 15	.... 75	1 25 1 50	1 75 2 00
1862.....	12 13	.... 75	1 25 1 50	1 75 2 00
1863.....	14 15	75 1 00	1 75 2 00	1 50 2 00
1864.....	15 20	1 00 1 25	1 75 2 00	2 25 2 75
1865.....	18 25	1 25 1 50	1 75 2 50	2 75 3 50
1866.....	18 25	1 25 1 50	1 75 2 50	2 50 3 00
1867.....	15 20	1 00 1 25	1 75 2 50	2 50 2 75
1868.....	15 20	1 00 1 25	1 75 2 50	2 25 2 50
1869.....	15 18	1 00 1 25	1 75 2 50	2 00 2 25

Years.	Monthly wages.		Day laborer's wages.		Female help wages per week.		Harvest wages per week.	
1870.....	\$15	\$18	\$1 00	\$1 25	\$1 75	\$2 50	\$1 75	\$2 00
1871.....	15	18	1 00	1 25	1 75	2 50	1 50	2 00
1872.....	15	18	1 00	1 25	1 50	2 00	1 50	2 00
1873.....	15	18	1 00	1 25	1 50	2 00	1 50	1 75
1874.....	15	18	1 00	1 25	1 50	2 00	1 50	1 75
1875.....	15	17	1 00	1 25	1 50	2 00	1 25	1 50
1876.....	15	17	1 00	1 25	1 50	2 00	1 25	1 50
1877.....	15	18	1 00	1 25	2 00	2 25	1 25	1 50
1878.....	16	18	1 00	1 25	2 00	2 25	1 25	1 50
1879.....	16	18	1 00	1 25	2 00	2 25	1 25	1 50
1880.....	16	18	1 00	1 25	2 00	2 25	1 25	1 50
1881.....	16	18	1 00	1 25	2 00	2 25	1 25	1 50
1882.....	16	18	1 00	1 25	2 00	2 25	1 25	1 50
1883.....	15	17	1 00	1 25	-----	-----	1 25	1 50
1884.....	15	17	1 00	1 25	2 00	2 25	1 25	1 50
1885.....	15	17	1 00	1 25	2 00	2 25	1 25	1 50
1886.....	15	17	75	1 00	2 00	2 25	1 25	1 50
1887.....	15	17	75	1 00	-----	-----	1 25	1 50
1888.....	15	18	75	1 00	-----	-----	1 25	1 50
1889.....	16	18	1 00	1 25	2 00	2 50	1 25	1 50
1890.....	16	18	1 00	1 25	2 00	2 50	1 25	1 50
1891.....	15	17	1 00	1 25	2 00	2 50	1 00	1 50

Another old record, made up from entries in the account books of Mr. M. E. Gray, of Willoughby, Lake county, gives a showing for the northern section of the state:

1840 to 1849, 50 cents per day, and in harvest 75 cents, with board.

1850, \$13 per month for eight months, with board.

1851, 62 1-2 cents per day, and in harvest \$1 per day, with board.

1852, \$13 per month.

1853, \$12 per month, with board.

1854, \$12 for eight months in summer, and \$10 for four months in winter.

1855, \$12.50 per month for the year, with board.

1856, \$11 per month, with board.

1857, \$13 per month to one man, and \$15 per month to another, with board.

1859, \$12 per month, with board.

1860, \$13 per month, with board.

1861, \$13 per month, with board.

1862, \$13 per month, with board.

1863, \$18 per month, with board.

1864, \$20 per month, with board.

Mr. Gray says in a note that when wages were 50 cents per day, or \$10 to \$12 per month, men were willing to work from sunrise to sunset, but now, with wages \$1.50 per day, ten hours constitutes a day's work.

The state agent for Michigan writes as to the results of his investigation:

I gather the following interesting items from a class of elderly correspondents and from younger ones having access to their fathers' books:

In 1840, \$7 per month, with board, by the year. Harvesting, 75 cents per day; 50 cents if boarded.

From 1840 to 1850, paid common laborers in winter 50 cents per day; in summer, 62 1-2 cents. For haying and harvesting, 75 cents to \$1 per day, with board.

From 1840 to 1855, good men got per day, with board, \$1 in harvest, 75 cents in haying, 50 cents for common labor, and \$11 per month, with board.

In 1852, 1853 and 1854, worked for \$10 per month in winter and \$13 per month for eight months in summer, with board.

From 1840 to 1855, good men got, with board, \$1 per day in harvest, 75 cents in haying, 50 cents for common labor, and \$11 per month when paid by the month. An intelligent correspondent, now 65 years old, and a prominent man in his town, says: "In 1846 I worked through the summer for \$11 per month, then the average price; in 1847, 1848, 1849 and 1850, for \$12 per month and board." In 1851, common labor, with board, 50 cents to 75 cents; harvesting and haying, \$1 to \$1.50. Another reports from his books as follows:

FARM LABORERS BY THE YEAR.

	Per month.
1849, 1850, 1851.....	\$10 00
1852, 1853, 1854.....	12 00
1855, 1856, 1857.....	12 50
1858, 1859, 1860.....	14 00
1862, 1863, 1864.....	25 00

During the years following 1840 monthly wages, including board, in Illinois averaged about \$8, with a slow but gradual rise until 1860, when it was perhaps double that figure.



## **Rates of Wages.**

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**PER DIEM, FOR THIRTY-FIVE YEARS,  
1856-1891.**

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Compiled in periods of seven years each, from the  
report of Hon. T. B. Aldrich, United States Senate  
Committee, 1893.

## FOURTH BIENNIAL REPORT

## RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employers.	1886 Employees.	1886 per Diem.	1883 Employees.	1883 per Diem.	1880 Employees.	1880 per Diem.	1877 Employees.	1877 per Diem.	1884 Employees.	1884 per Diem.	Employees.	1891 per Diem.	Average per Diem.
Machinist	Agricultural imp.	Mass.	38	3	\$1 55	2	\$1 68	17	\$2 25	12	\$1 81	26	\$2 00	23	\$2 01	\$1 89
"	Books and papers.	N. Y.	19	1	1 66	2	1 56	7	2 62	3	1 90	2	2 50	4	2 50	2 12
"	Building trades.	N. Y.	69	1	1 50	2	1 62	4	2 00	14	1 90	28	1 95	20	1 88	1 81
"	Public works.	Pa. . .	143	4	1 50	2	1 50	21	2 75	40	2 88	46	2 90	30	2 93	2 41
"	Cotton Manufacturing.	Mass.	82	8	1 51	14	1 71	16	2 73	14	1 88	16	1 82	14	1 69	1 89
"	"	Mass.	204	14	1 50	17	1 45	38	2 15	37	1 85	46	1 80	52	1 91	1 78
"	"	N. Y.	6	1	2 00	1	1 66	1	3 25	1	2 36	1	3 00	1	3 25	2 99
"	Metal.	Conn.	189	26	1 79	18	1 79	31	2 70	22	2 35	36	2 49	56	2 48	2 27
"	"	Conn.	340	85	1 72	144	2 05	59	2 90	6	2 30	16	2 42	30	2 33	2 32
"	"	Md. . .	285	33	1 64	49	1 88	63	2 58	32	2 31	41	2 63	67	2 56	2 27
"	"	Mass.	1049	121	1 70	148	1 77	142	2 58	62	2 27	279	2 47	295	2 41	2 20
"	"	Mass.	381	28	1 55	44	1 60	46	2 50	36	2 25	127	2 25	100	2 25	2 07
"	"	N. H.	95	28	1 50	24	1 67	14	2 32	7	1 65	12	1 66	10	1 78	1 76
"	"	N. J.	79	16	1 61	16	1 77	12	2 40	14	2 46	11	2 59	10	2 73	2 26
"	"	N. Y.	136	19	1 76	20	1 66	26	2 46	17	2 16	22	2 48	32	2 54	2 18
"	"	N. Y.	270	46	1 73	25	1 68	33	2 36	49	2 00	45	2 32	72	2 10	2 03

Machinist	Metal	N. Y.	95	4	1 74	9	2 00	9	3 40	15	2 93	19	2 78	39	2 65	2 58
"	"	Pa. ..	330	28	1 61	26	1 83	19	2 82	38	2 10	104	2 51	115	2 45	2 22
"	"	Pa. ..	289	31	1 54	31	1 85	32	2 51	51	2 12	59	2 35	86	2 89	2 21
"	Paper	Mass.	19	1	1 33	2	1 50	4	2 87	4	2 37	4	2 50	4	2 75	2 22
Totals and averages			4,163	500	\$1 62	596	\$1 71	594	\$2 61	474	\$2 19	940	\$2 37	1,059	\$2 40	\$2 15
Mach. helpers	Metal	Conn.	66	6	\$1 12	5	\$1 20	9	\$1 44	8	\$1 48	22	\$1 39	16	\$1 20	\$1 30
"	"	Conn.	137	21	1 05	62	1 25	15	1 76	10	1 50	12	1 44	17	1 60	1 44
"	"	Conn.	76	2	1 16	14	1 16	6	1 72	6	1 37	17	1 45	31	1 46	1 39
"	"	Mass.	494	28	1 26	42	1 21	29	1 54	4	1 85	99	1 64	292	1 61	1 52
"	"	N. Y.	52	10	1 03	4	1 08	7	1 59	9	1 65	13	1 67	9	1 50	1 42
"	"	N. Y.	49	15	98	4	1 00	7	1 18	9	1 46	3	1 46	11	1 34	1 24
"	"	N. Y.	59	1	1 00	2	1 00	8	1 27	11	1 35	20	1 50	17	1 58	1 29
Totals and averages			933	83	\$1 09	133	\$1 13	81	\$1 50	57	\$1 54	186	\$1 51	393	\$1 47	\$1 37
Moulders	Agricultural Imp	Mass.	87	4	\$1 55	4	\$1 73	20	\$2 32	9	\$2 13	24	\$2 18	26	\$2 02	\$1 99
"	Metals	Conn.	105	2	1 70	7	1 98	44	2 67	15	2 42	17	2 39	20	2 42	2 26
"	"	Conn.	249	15	1 56	21	1 66	48	2 43	33	1 98	42	2 25	90	2 20	2 01
"	"	Md. ..	162	14	1 86	10	1 93	13	2 68	20	2 15	49	2 46	56	2 45	2 25
"	"	Mass.	176	40	1 57	39	1 69	34	2 42	11	2 17	35	2 16	17	2 28	2 05
"	"	N. Y.	91	16	1 65	12	1 77	16	2 89	13	2 44	14	2 57	20	2 57	2 31
"	"	N. Y.	256	36	1 52	36	1 58	47	2 10	37	2 09	46	2 11	54	2 03	1 90

## RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employers.	Employees.	1856	Employees.	1861	Employees.	1870	Employees.	1877	Employees.	1884	Employees.	1891	Average per Diem.
Moulders.....	Metals.....	N. Y.	193	24 \$1 86	23 \$2 09	30 \$3 38	28 \$2 55	38 \$2 84	50 \$3 11	\$2 64						
"	"	Pa....	217	11 1 62	15 1 62	24 2 43	16 2 02	52 2 47	99 2 46	2 10						
"	"	Pa....	128	12 1 50	16 2 30	14 2 60	10 2 20	24 2 40	52 2 50	2 25						
Totals and averages.....			1,664	174 \$1 64	183 \$1 84	290 \$2 59	192 \$2 21	341 \$2 38	484 \$2 40	\$2 18						
Moulders' helpers.	Metals.....	Conn.	60	11 \$1 10	11 \$1 31	4 \$1 46	8 \$1 43	9 \$1 39	17 \$1 45	\$1 36						
"	"	"	251	29 1 04	24 1 13	47 1 63	34 1 33	53 1 43	64 1 43	1 33						
"	"	N. Y.	25	5 1 25	8 1 14	6 1 72	2 1 62	2 1 57	2 1 55	1 47						
"	"	"	139	31 88	30 1 04	7 1 29	22 1 26	23 1 43	26 1 34	1 21						
Totals and averages.....			475	76 \$1 07	73 \$1 15	64 \$1 52	66 \$1 41	87 \$1 45	109 \$1 45	\$1 34						
Boilermakers.....	Metals.....	Conn.	47	6 \$1 83	5 \$2 33	13 \$2 41	6 \$2 70	7 \$2 21	10 \$2 37	\$2 31						
"	"	"	152	36 1 57	41 1 98	25 2 60	17 2 16	20 2 52	13 2 68	2 25						
"	"	Md..	64	11 1 73	14 1 90	19 2 36	6 2 33	6 2 91	8 2 81	2 34						
"	"	N. Y.	271	42 1 55	19 1 60	43 2 19	55 1 85	53 2 06	59 2 18	1 90						
Totals and averages.....			534	95 \$1 67	79 \$1 95	100 \$2 39	84 \$2 26	86 \$2 42	90 \$2 51	\$2 20						

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Bl'm'k's h'p'm.	Conn	39	10 \$1 11	14 \$1 18	3 \$1 79	1 \$1 75	6 \$1 61	5 \$1 75	\$1 55
" "	Conn	90	24 1 07	15 1 17	14 1 73	5 1 29	20 1 41	12 1 69	1 39
" "	N. Y.	161	71 89	8 83	6 1 09	27 1 15	9 1 30	40 1 39	1 11
<b>Totals and averages</b>		260	105 \$1 02	37 \$1 06	23 \$1 54	33 \$1 39	35 \$1 44	57 \$1 61	\$1 34
<b>Patternmakers</b>	<b>Metals</b>								
"	Conn	38	6 \$1 74	7 \$1 67	6 \$1 37	5 \$1 19	7 \$2 57	7 \$2 61	\$2 52
"	Conn	30	5 1 70	4 1 87	6 3 33	4 2 89	5 2 54	6 3 04	2 56
"	Md.	123	19 1 58	22 1 78	24 3 00	23 2 50	21 2 51	14 2 57	2 32
"	Mass.	12	2 1 55	2 1 75	2 2 80	2 3 00	2 2 75	2 2 75	2 43
"	Mass.	56	6 1 75	6 2 75	6 3 00	10 2 00	14 2 40	14 2 50	2 40
"	N. Y.	46	7 1 57	6 1 48	6 2 58	7 2 54	11 5 58	9 2 55	2 22
<b>Totals and averages</b>		305	45 \$1 65	47 \$1 88	50 \$1 01	51 \$2 69	60 \$2 56	52 \$2 67	\$2 41
<b>Blacksmiths</b>	<b>Agricultur'l implem't.</b>								
"	Del.	21	2 \$1 75	2 \$1 87	4 \$2 50	2 \$2 00	5 \$1 90	6 \$1 91	\$1 97
"	Car and ship building	99	7 1 75	9 1 87	7 2 31	26 2 37	20 2 06	30 2 19	2 09
"	Carriage and wagons	52	6 1 50	6 3 00	10 3 00	10 3 00	10 3 00	10 3 00	2 75
"	Public works	76	6 1 66	11 1 98	29 3 50	10 3 00	12 3 00	8 3 00	2 69
"	Public works	33	3 1 70	3 1 88	3 2 45	8 3 00	8 2 81	8 3 00	2 47
"	Illuminating gas	28	2 1 50	6 2 00	6 3 25	6 2 62	4 2 50	4 2 25	2 35
"	Metals	20	2 2 00	3 2 16	4 2 87	3 2 83	3 3 33	5 2 94	2 69
"	Conn	81	17 1 56	18 1 92	7 2 83	12 2 60	13 2 55	14 2 45	2 32
"	Md.	59	12 1 54	12 1 77	12 2 56	6 2 16	9 2 47	8 2 37	2 14

## RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employers.	1856	1861	1866	1871	1877	1884	1891	Average per Diem.
Blacksmiths.....	Metals.....	Mass.	12	2 \$1 75	2 \$1 87	2 \$3 00	2 \$3 00	2 \$3 00	2 \$3 25	2 \$3 37	\$2 71
"	"	N. H.	14	2 1 45	4 1 62	2 2 12	2 2 00	2 2 00	2 1 75	2 2 00	1 82
"	"	N. H.	154	22 1 99	19 2 39	26 3 48	26 2 86	26 2 86	32 2 86	29 3 07	2 77
"	"	N. J.	23	3 1 90	3 2 60	6 3 05	5 2 60	5 2 60	4 2 81	2 3 00	2 66
Totals and averages.....			672	86 \$1 62	98 \$2 07	118 \$2 84	118 \$2 62	124 \$2 64	128 \$2 66		\$2 42
Blacks'th's helpers	Agricultural imp.....	Mass.	13	2 \$1 25	2 \$1 50	1 \$1 75	4 \$1 45	2 \$1 50	2 \$1 50	2 \$1 50	\$1 49
"	Carriage and wagon.....	N. Y.	64	6 83	10 1 50	10 1 50	10 1 50	10 1 50	10 1 75	18 1 75	1 47
"	Public works.....	N. Y.	57	4 1 00	9 1 30	26 2 00	6 1 80	4 2 00	4 2 00	8 2 00	1 68
"	Public works.....	Pa....	32	2 1 25	2 1 50	2 2 25	10 2 25	8 1 93	8 1 93	8 2 00	1 86
"	Illuminating gas.....	Ohio.	13	2 1 00	2 1 20	2 2 00	2 1 62	3 1 50	3 1 66	2 1 65	1 49
"	Metals.....	N. Y.	20	2 1 50	4 1 40	2 1 80	3 1 50	3 1 50	3 1 66	6 1 58	1 57
"	"	Md....	52	11 96	12 1 12	11 1 75	4 1 50	4 1 50	4 1 37	10 1 40	1 35
"	"	N. J.	29	6 1 50	6 1 89	6 2 00	5 1 50	5 1 50	4 1 75	2 1 85	1 75
"	"	N. Y.	25	6 95	2 1 00	3 1 65	2 1 50	2 1 50	3 1 80	9 1 80	1 45
"	"	N. Y.	40	15 92	2 1 06	2 1 62	6 1 33	5 1 50	10 1 43		1 31

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Blacks'th's helpers		Metals.		N. H.	
"	"	"	"	Pa.	"
141	14	17	1 40	30	2 01
41	6 1 00	4 1 16	7 1 58	6 1 30	8 1 40
Totals and averages					
537	76 \$1 22	72 \$1 46	102 \$1 99	82 \$1 72	86 \$1 80
Engineers					
65	8 \$2 00	12 \$1 99	10 \$2 58	14 \$2 66	9 \$2 58
20	2 2 62	2 3 00	6 2 75	6 3 04	2 3 50
27	3 1 91	6 2 49	4 3 50	6 3 83	4 3 25
10	2 1 25	1 1 50	2 2 71	1 2 50	2 2 00
12	2 1 66	2 1 50	2 2 75	2 2 75	2 2 75
11	2 1 17	2 1 21	2 2 00	1 2 00	2 1 15
12	2 1 80	2 2 53	2 2 82	2 2 52	3 3 00
19	1 1 16	2 1 33	4 2 00	4 1 62	4 1 75
799	85 2 49	90 2 43	149 3 80	125 3 57	131 3 75
Totals and averages					
975	107 \$1 78	119 \$2 00	181 \$2 77	161 \$2 72	158 \$2 64
Fireman					
124	2 \$1 23	11 \$1 26	16 \$1 64	44 \$1 95	15 \$2 04
65	5 1 38	8 1 44	8 1 66	12 1 61	12 1 49
12	2 1 00	2 84	2 1 75	2 1 27	2 1 25
154	14 1 00	23 1 26	26 2 00	32 1 77	25 1 84
660	120 1 43	120 2 00	150 3 00	110 3 00	75 3 00
1334	74 1 26	150 1 57	514 2 25	152 2 22	172 2 15
680	50 1 34	94 1 34	94 2 00	94 1 80	128 1 99
Totals and averages					
3019	267 \$1 22	408 \$1 39	810 \$2 04	446 \$1 95	429 \$1 97
Totals and averages					
659	\$2 04	659	\$2 04	\$1 77	\$1 77

# RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employers.	Employees.	1856 Employees.	1859 Employees.	1861 Employees.	1867 Employees.	1877 Employees.	1884 Employees.	1891 Employees.	Average per Diem.
Plumbers .....	Building trades.....	N. J..	25	5 \$1 67	4 \$1 93	6 \$3 25	4 \$2 91	4 \$2 62	2 \$2 50			\$2 48
Plumbers .....	Building trades.....	N. Y..	58	12 2 16	22 2 25	8 3 81	4 3 00	6 3 50	6 3 50			3 04
Totals and averages.....			83	17 1 91	26 2 09	14 3 53	8 2 95	10 3 06	8 3 00			2 76
Plasterers .....	Building trades.....	N. Y..	60	1 1 75	9 2 37	32 5 00	8 2 50	6 4 00	4 4 25			3 31
Plasterers .....	Building trades.....	Pa....	138	24 1 62	20 1 92	25 3 20	26 1 94	21 3 44	22 3 35			2 58
Totals and averages.....			198	25 1 68	29 2 18	37 4 10	34 2 22	27 3 72	26 3 80			2 98
Tinsmiths.....	Building trades.....	N. J..	41	14 1 35	5 1 70	8 2 63	7 2 43	4 2 54	3 2 53			2 19
Tinsmiths.....	Building trades.....	Del...	83	11 1 25	11 1 55	11 1 94	7 1 85	19 2 19	24 2 32			1 85
Totals and averages.....			124	25 1 30	16 1 62	19 2 29	14 2 14	23 2 36	5 2 43			2 02
Carpenters .....	Agricultural implements	Mass.	94	3 1 42	3 1 50	19 2 26	15 1 77	32 1 86	22 1 71			1 75
" .....	Building trades.....	Conn.	35	7 1 45	5 1 65	8 3 18	3 1 91	6 2 75	6 3 12			2 34
" .....	" .....	Conn.	177	7 1 60	20 1 92	78 2 82	5 2 25	39 2 47	28 2 61			2 28
" .....	" .....	Md....	151	12 1 60	12 1 68	25 2 71	43 2 29	36 2 56	23 2 57			2 23
" .....	" .....	Mass.	241	24 1 32	43 1 46	33 2 45	52 1 78	43 1 93	46 1 99			1 82



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<b>Carpenters</b>	<b>Building trades</b>	<b>N. Y.</b>	324	28	1 32	15	1 95	24	2 46	45	1 90	155	2 13	57	2 12	1 98
"	"	N. Y.	779	65	1 83	72	2 00	145	3 58	205	2 50	150	3 50	142	3 50	2 82
"	"	Pa.	292	10	1 50	14	2 00	38	2 65	40	2 10	74	2 69	116	2 80	2 29
"	"	Pa.	247	16	1 50	15	2 66	32	2 50	33	2 75	62	2 75	89	2 70	2 48
"	"	R. I.	117	12	1 45	12	1 95	53	2 22	15	1 81	9	1 76	16	2 18	1 89
"	Car and ship builders	Del.	272	21	1 45	25	1 90	21	2 32	106	2 24	43	2 53	56	2 71	2 19
"	Public works	N. Y.	176	3	1 50	27	1 97	65	4 00	37	2 87	38	3 00	6	3 00	2 72
"	Public works	Pa.	10	2	1 75	2	2 00	2	2 25	1	2 87	1	3 00	2	3 00	2 48
"	Illuminating gas	O. ....	16	4	1 50	4	1 87	2	2 25	2	2 25	2	2 50	2	2 50	2 15
<b>Totals and averages</b>			2,931	214	\$1 55	269	\$1 89	545	\$2 69	602	\$2 24	690	\$2 53	611	\$2 61	\$2 24
<b>Carpenters' helpers</b>	<b>Building trades</b>	<b>Conn.</b>	49	2	\$1 00	2	\$1 25	21	\$1 20	2	\$1 46	14	\$1 63	8	\$1 45	\$1 33
"	"	Mass.	88	5	75	8	1 00	10	1 42	30	1 08	16	1 20	19	1 14	1 10
"	"	N. Y.	39	8	86	7	1 15	4	1 50	3	1 37	12	1 31	5	1 40	1 26
<b>Totals and averages</b>			176	15	\$ 87	17	\$1 13	35	\$1 37	35	\$1 30	42	\$1 38	32	\$1 33	\$1 23
<b>Carpenter foremen</b>	<b>Building trades</b>	<b>Pa. ...</b>	27	1	\$2 00	1	\$2 25	2	\$2 75	6	\$2 87	4	\$3 81	13	\$3 65	\$2 89
"	Building trades	R. I.	26	6	2 50	6	2 75	6	3 50	2	2 62	3	3 00	3	3 25	2 94
"	Cars and ships	Del.	18	2	2 25	2	2 50	2	3 00	4	4 00	4	4 00	4	4 16	3 32
<b>Totals and averages</b>			71	9	\$2 25	9	\$2 50	10	\$3 08	12	\$3 16	11	\$3 60	20	\$3 69	\$3 05

# RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employers.	1856 Employees.	1861 Employees.	1866 Employees.	1871 Employees.	1876 Employees.	1881 Employees.	1884 Employees.	1891 Employees.	Average per Diem.
Masons.....	Building trades .....	Conn.	154	12 \$1 90	11 \$2 61	40 \$3 93	16 \$2 61	48 \$3 57	27 \$3 70		\$3 05	
".....	".....	Mass.	164	4 1 50	13 1 86	26 3 63	56 2 63	27 3 64	38 3 33		2 76	
".....	Public works.....	N. Y.	28	3 3 00	4 3 25	3 4 00	9 4 00	3 4 00	6 4 33		3 76	
".....	".....	N. Y.	93	6 1 75	19 2 12	50 4 25	4 3 00	12 3 25	2 3 50		2 98	
".....	Metals.....	N. Y.	66	19 1 62	11 2 07	4 2 90	6 2 58	22 3 01	4 3 37		2 59	
".....	Railroads .....	Mass.	99	1 2 00	8 2 25	3 4 00	10 3 40	52 2 96	25 2 76		2 89	
Totals and averages.....												
			604	45 \$1 96	66 \$2 36	126 \$3 78	101 \$3 04	164 \$3 40	102 \$3 50		\$3 01	
Masons' helpers...	Building trades .....	Mass.	193	21 \$1 12	22 \$1 21	29 \$2 05	36 \$1 70	32 \$1 50	53 \$1 62		\$1 53	
".....	Metals.....	N. Y.	88	15 89	12 1 07	9 1 47	12 1 25	34 1 40	6 1 54		1 27	
Totals and averages.....												
			281	36 \$1 00	34 \$1 14	38 \$1 76	48 \$1 47	66 \$1 45	59 \$1 58		\$1 40	
Bricklayers .....	Building trades .....	Mass.	175	15 \$1 70	21 \$1 86	23 \$3 80	47 \$2 75	39 \$3 06	30 \$3 05		\$2 70	
".....	".....	N. Y.	61	2 1 75	9 2 50	32 5 00	8 2 50	6 4 00	4 4 25		3 33	
".....	".....	Pa. --	300	26 1 75	26 2 25	65 3 50	75 2 75	70 3 25	38 4 00		2 92	

Bricklayers .....	N. Y.	Public works .....	105	20	1	70	19	2	15	50	4	3	00	4	3	50	4	3	50	3	03		
Bricklayers .....	Ohio.	Illuminating gas .....	54	4	2	00	4	2	75	4	5	00	4	4	00	10	3	54	28	3	47		
Totals and averages .....			699	67	\$1	.78	79	\$2	.30	174	\$4	.31	138	\$3	.00	136	\$3	.47	104	\$3	.66	\$3	.09
Bricklayers help..	Mass.	Building trades .....	198	13	\$1	.05	23	\$1	.22	34	\$2	.06	34	\$1	.82	34	\$1	.50	60	\$1	.56	\$1	.54
" ..	N. Y.	" ..	129	2	1	00	12	1	62	67	2	75	16	1	50	20	2	50	12	2	50	1	.98
" ..	Pa...	" ..	134	13	1	.05	13	1	25	32	2	00	22	1	75	35	2	00	19	2	25	1	.71
Totals and averages .....			461	28	\$1	.03	48	\$1	.36	133	\$2	.27	72	\$1	.69	89	\$2	.00	91	\$2	.05	\$	.47
Brickl'y's f'r'mn.	Mass.	Building trades .....	12	1	\$2	.25	3	\$2	.62	2	\$5	.00	2	\$4	.75	2	\$5	.00	2	\$4	.50	\$4	.00
" ..	Mass.	Building trades .....	10	1	2	.25	1	2	75	2	5	.00	2	4	.75	2	5	.00	2	4	.50	4	.06
Totals and averages .....			22	2	\$2	.25	4	\$2	.68	4	\$5	.00	4	\$4	.75	4	\$5	.00	4	\$4	.50	\$4	.03
Hod carriers .....	Conn.	Building trades .....	226	19	\$	.88	17	\$1	.55	65	\$1	.90	27	\$1	.41	61	\$1	.94	37	\$2	.02	\$1	.61
Steam & gas fit ..	Mass.	Building trades .....	118	1	\$1	.58	5	\$2	.07	13	\$2	.09	14	\$2	.05	41	\$2	.07	44	\$1	.94	\$1	.96
" helpers	Mass.	Building trades .....	12	1	\$1	.25	2	\$	.88	3	\$1	.00	4	\$	.95	1	\$1	.00	1	\$1	.16	\$1	.04
Painters .....	Mass.	Agricultural imp. ....	32	1	\$1	.25	1	\$1	.25	5	\$1	.50	3	\$1	.49	8	\$1	.56	14	\$1	.50	\$1	.42
" ..	Md..	Building trades .....	48	7	.75	75	9	1	62	10	3	.00	8	2	.00	10	2	.50	4	2	.50	2	.23
" ..	Mass.	" ..	70	3	1	12	12	1	31	15	2	11	15	1	83	14	1	61	11	1	.93	1	.65
" ..	Mass.	" ..	90	2	1	00	6	1	24	15	2	.38	21	2	.45	18	2	.26	28	2	.30	1	.94
" ..	N. Y.	" ..	14	1	1	.25	1	1	.50	2	2	.00	4	1	.70	3	2	.00	3	2	.12	1	.76
" ..	N. Y.	" ..	529	60	2	.00	50	2	.20	85	3	.68	135	2	.58	97	3	.00	102	3	.50	2	.83
" ..	N. Y.	" ..	42	17	1	.70	7	2	.21	8	\$	.12	4	2	.37	4	2	.50	2	3	.00	2	.48

# RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employees.	1856 Employees.	1863 Employees.	1870 Employees.	1877 Employees.	1884 Employees.	1891 Employees.	Average per Diem.
Painters .....	Building trades .....	Pa. . .	89	10 \$1 75	10 \$2 25	23 \$3 02	23 \$2 55	9 \$2 56	14 \$2 74	\$2 48
" .....	Building trades .....	Del. .	132	5 1 75	5 1 98	51 2 45	18 1 80	35 2 24	18 2 16	2 06
" .....	Carriage builders .....	N. Y.	58	4 1 25	6 1 75	8 1 75	8 1 75	16 2 50	16 2 50	1 92
Totals and averages .....			\$1,104	110 \$1 48	107 \$1 73	222 \$2 50	239 \$2 05	214 \$2 27	212 \$2 43	\$2 08
Teamsters .....	Agricultural imp's .....	Mass.	8	1 \$1 25	1 \$1 50	1 \$1 75	2 \$1 50	1 \$1 45	2 \$1 65	\$1 52
" .....	Building trades .....	N. Y.	32	2 81	2 1 12	2 1 50	6 1 15	15 1 52	5 1 69	1 30
" .....	Public works .....	N. Y.	19	2 1 00	2 1 25	2 1 55	3 1 53	4 1 91	6 1 92	1 53
" .....	Cotton goods .....	Mass.	30	5 1 31	5 1 29	4 2 00	2 1 75	2 2 00	12 1 30	1 61
" .....	Lumber .....	N. Y.	24	2 87	4 1 10	6 1 58	4 1 62	6 1 66	2 1 66	1 42
" .....	Metals .....	Md. .	31	6 1 04	5 1 15	8 1 63	4 1 33	4 1 33	4 1 58	1 34
" .....	" .....	Mass.	51	6 1 00	23 1 11	10 1 55	1 1 50	9 1 33	2 1 50	1 33
" .....	" .....	N. Y.	18	1 1 00	2 1 00	3 1 55	4 1 62	4 1 50	4 1 50	1 36
" .....	Sidewalks .....	N. Y.	12	2 2 00	2 2 00	2 2 00	2 2 00	2 2 00	2 2 00	2 00
" .....	Stone .....	Md. .	22	4 1 12	2 1 06	6 1 67	6 1 50	2 1 28	2 1 28	1 32
Totals and averages .....			247	31 \$1 14	48 \$1 26	44 \$1 68	34 \$1 55	49 \$1 60	41 \$1 53	\$1 47

Stone cutters.....	N. Y.	593	328	\$2 03	20	\$2 02	235	\$4 25	4	\$3 00	4	\$3 25	2	\$3 50	\$3 01
"	N. Y.	149	2	2 00	2	2 25	14	4 25	14	3 00	10	3 75	10	4 00	3 21
"	Pa...	151	7	1 50	10	2 00	10	3 40	20	3 30	59	3 30	45	3 40	2 81
Totals and averages.....		893	337	\$1 84	23	\$2 09	356	\$3 96	38	\$3 10	73	\$3 43	57	\$3 64	\$3 01
Marble cutters.....	Md..	92	10	\$2 10	7	\$2 25	20	\$3 50	11	\$2 82	26	\$2 69	18	\$2 87	\$2 70
"	N. Y.	166	15	2 25	13	1 88	28	3 19	27	2 85	32	2 79	51	3 51	2 74
Granite cutters.....	N. Y.	57	4	2 37	4	2 06	11	4 20	7	2 74	12	3 29	19	4 00	3 11
Totals and averages.....		315	29	\$2 24	24	\$2 06	59	\$3 61	45	\$2 60	70	\$2 92	88	\$3 46	\$2 85
Quarrymen foreman.....	Conn.	73	8	\$1 30	9	\$1 96	9	\$2 65	19	\$2 62	12	\$2 94	16	\$2 96	\$2 40
"	Conn.	52	3	1 64	3	2 00	15	2 95	4	2 57	13	2 43	14	2 03	2 27
Totals and averages.....		125	11	\$1 47	12	\$1 98	24	\$2 80	23	\$2 59	25	\$2 69	30	\$2 50	\$2 34
Quarrymen.....	Conn.	3170	452	\$1 14	334	\$1 14	865	\$1 93	459	\$1 30	564	\$1 49	496	\$1 62	\$1 44
"	Conn.	2219	227	1 05	256	1 35	433	2 10	388	1 34	430	1 30	485	1 60	1 46
Totals and averages.....		5389	679	\$1 09	590	\$1 25	1298	\$2 01	847	\$1 32	994	\$1 40	981	\$1 61	\$1 45
Polishers.....	Md..	66	12	\$1 11	5	\$1 13	17	\$1 75	12	\$1 58	12	\$1 58	8	\$1 54	\$1 45
"	N. Y.	88	2	1 37	8	1 29	27	2 19	20	1 81	23	2 24	8	2 75	1 94
"	N. Y.	87	20	1 16	20	1 22	11	2 78	14	2 03	14	2 25	8	3 00	2 07
Totals and averages.....		241	34	\$1 21	33	\$1 21	55	\$2 24	46	\$1 80	49	\$2 02	24	\$2 43	\$1 82

## RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employers.	1865 Employees.	1865 per Diem.	1870 Employees.	1870 per Diem.	1877 Employees.	1877 per Diem.	1884 Employees.	1884 per Diem.	1891 Employees.	1891 per Diem.
Laborers.....	Agricultural Implem'ts.	Mass.	58.	10	\$ .87	8	\$1.02	6	\$1.56	14	\$1.21	11	\$1.38
"	Public works.....	Mass.	81	18	1.00	9	1.09	75	1.78	120	1.02	293	1.51
"	Building.....	N. J.	23	4	1.00	4	1.14	6	1.55	4	2.00	3	1.50
"	Building.....	N. Y.	32	2	.75	2	1.00	2	1.12	6	1.12	10	1.38
"	Public works.....	Mass.	381	18	1.00	12	1.49	27	1.78	69	1.02	116	1.50
"	Public works.....	Pa.	58	12	1.30	8	1.28	14	1.77	13	1.75	4	1.75
"	Garden.....	Pa.	748	28	1.25	34	1.50	270	1.75	160	1.33	141	1.50
"	Lumber.....	N. H.	25	2	.38	4	.61	5	.69	4	.69	6	.75
"	Metals.....	Md.	94	11	1.00	16	1.07	8	1.57	22	1.09	17	1.23
"	"	Mass.	569	69	.90	69	.93	68	1.39	47	1.30	201	1.11
"	"	Mass.	31	4	.90	5	.90	4	1.40	4	1.90	10	2.00
"	"	Mass.	48	4	1.25	4	1.41	2	1.75	8	1.51	20	1.54
"	"	N. H.	31	3	1.16	7	1.15	4	1.49	1	1.50	9	1.19
"	"	N. J.	20	4	1.25	2	1.50	2	1.87	2	1.75	4	1.68
"	"	N. J.	109	7	.83	11	.84	27	1.50	21	1.26	19	1.50

Labors	Quarry	Md.	52	2	1 12	5	1 13	8	1 75	6	1 61	12	1 53	19	1 53	1 45
Labors	White lead	Pa.	113	22	1 15	17	1 25	2	2 00	8	1 38	45	1 29	19	1 33	1 40
Totals and averages			3,223	220	1 01	215	1 14	530	1 57	509	1 38	921	1 43	836	1 45	1 33
Compositors	Books and papers	N. Y.	126	2	2 00	2	2 16	4	3 25	30	2 56	39	2 54	49	2 55	2 51
"	"	N. Y.	176	14	25	12	37	7	43	27	36	50	34	46	34	35
"	"	N. Y.	142	18	1 64	21	1 65	42	3 00	22	2 92	24	2 26	15	2 50	2 33
"	"	N. Y.	243	3	1 72	12	2 00	46	3 00	93	2 67	53	2 50	36	2 53	2 40
Totals and averages			511	23	1 79	35	1 94	92	3 08	145	2 72	116	2 43	100	2 53	2 41
Foremen, comp...	Books and papers	N. Y.	37	5	2 12	4	2 50	6	3 33	10	3 41	6	2 16	6	3 08	2 93
"	"	N. Y.	18	2	2 00	2	2 00	4	3 41	4	3 33	2	3 16	4	3 08	2 83
"	"	N. Y.	26	2	3 19	1	3 75	1	3 60	10	3 50	6	3 55	6	4 11	3 62
Totals and averages			81	9	2 44	7	2 75	11	3 45	24	3 41	14	3 29	16	3 42	3 13
Pressmen	Books and papers	N. Y.	116	17	1 84	19	1 81	14	2 62	26	2 69	21	2 32	19	2 37	2 27
"	"	N. Y.	22	4	1 83	2	2 16	4	2 33	4	2 95	4	2 33	4	2 50	2 35
Totals and averages			138	21	1 83	21	1 98	18	2 48	30	2 82	35	2 37	23	2 43	2 32
Foremen, pressm	Books and papers	N. Y.	12	2	2 66	2	2 50	2	3 33	2	3 33	2	3 00	2	3 00	2 97
"	"	N. Y.	6	1	2 00	1	2 00	1	3 00	1	3 00	1	3 00	1	3 00	2 67
"	"	N. Y.	13	1	2 75	1	3 60	1	3 66	2	3 83	4	4 08	4	4 16	3 68
Totals and averages			31	4	2 47	4	2 72	4	3 33	5	3 39	7	3 36	7	3 38	3 11

## RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employers.	1856 Employees.	1861 Employees.	1869 Employees.	1877 Employees.	1884 Employees.	1891 Employees.	Average per Diem.						
Press feeders.....	Books and papers.....	N. Y.	205	30	\$ 58	10	\$ 64	15	\$1 05	48	\$ 98	51	\$ 97	51	\$1 16	\$ 90
Overs'rs card.dept.	Woolen goods.....	Conn.	11	1	\$1 33	2	\$3 00	2	\$3 50	2	\$3 50	2	\$3 25	2	\$4 00	\$3 09
"	"	Mass.	10	1	2 00	2	2 30	2	3 00	1	3 50	2	3 50	2	4 25	3 09
"	"	R. I.	11	1	1 75	2	2 50	2	4 25	2	3 15	2	5 00	2	5 00	3 60
Totals and averages.....			32	3	\$1 69	6	\$2 60	6	\$3 58	5	\$3 38	6	\$3 91	6	\$4 41	\$3 26
Overs'rs dye house	Woolen goods.....	Conn.	11	1	\$2 00	2	\$2 50	2	\$3 87	2	\$2 87	2	\$4 25	2	\$4 25	\$3 29
"	"	Mass.	10	1	1 50	3	2 43	2	3 00	1	2 25	1	2 75	2	3 00	2 48
"	"	R. I.	12	2	1 67	2	2 00	2	2 50	2	2 50	2	4 50	2	5 00	3 02
Totals and averages.....			33	4	\$1 72	7	\$2 31	6	\$3 12	5	\$2 54	5	\$3 83	6	\$4 08	\$2 93
Overs'rs fin. dept..	Woolen goods.....	Conn.	11	1	\$1 25	2	\$3 00	2	\$2 50	2	\$2 25	2	\$4 00	2	\$3 50	\$2 75
"	"	Mass.	9	1	2 00	1	3 00	2	3 50	1	2 25	2	2 50	2	4 00	2 87
"	"	R. I.	12	2	1 50	2	1 50	2	2 37	2	2 60	2	4 00	2	3 75	2 62
Totals and averages.....			32	4	\$1 58	5	\$2 50	6	\$2 79	5	\$2 36	6	\$3 50	6	\$3 75	\$2 74
O'rs full'g & gig'g	Woolen goods.....	Conn.	11	1	\$1 25	2	\$1 40	2	\$2 75	2	\$2 25	2	\$2 50	2	\$2 50	\$2 11



Ov'r's spin. dept.	Conn.	10	1	\$1 50	1	\$1 66	2	\$3 00	2	\$3 00	2	\$3 25	2	\$2 75	\$2 52
"	Mass.	9	1	1 50	1	1 75	2	2 00	1	2 50	2	3 00	2	3 00	2 29
"	R. I.	12	2	1 21	2	1 67	2	2 75	2	2 25	2	3 25	2	3 00	2 35
Totals and averages		31	4	\$1 40	4	\$1 69	6	\$2 57	5	\$2 58	6	\$3 16	6	\$2 91	\$2 38
Ov'r's spool.dept	Mass.	8	1	\$1 50	1	\$2 00	1	\$2 00	1	\$1 75	2	\$2 25	2	\$2 25	\$1 95
Ov'r's spool.dept	Conn.	10	1	2 00	1	2 25	2	2 25	2	2 00	2	2 37	2	2 50	2 23
Totals and averages		18	2	\$1 75	2	\$2 12	3	\$2 12	3	\$1 87	4	\$2 31	4	\$2 37	\$2 09
Ov'r's weav. dept	Conn.	15	1	\$1 33	2	\$1 75	2	\$3 00	2	\$3 00	2	\$3 00	6	\$3 00	\$2 51
"	Mass.	8	1	2 00	2	2 50	1	3 50	1	3 00	1	3 00	2	3 00	2 83
"	R. I.	12	2	1 33	2	1 50	2	2 25	2	3 00	2	3 00	2	3 37	2 40
Totals and averages		35	4	\$1 55	6	\$1 91	5	\$2 91	5	\$3 00	5	\$3 00	10	\$3 12	\$2 58
Fullers and giggers	Conn.	111	5	\$ 58	15	\$ 78	23	\$1 22	26	\$1 15	16	\$1 21	26	\$1 16	\$1 01
"	R. I.	38	4	81	4	83	7	1 25	8	1 00	8	1 17	7	1 16	1 03
"	R. I.	12	2	1 17	2	1 24	2	1 50	2	1 50	2	1 75	2	1 50	1 44
Totals and averages		161	11	\$ 85	21	\$ 95	32	\$1 32	36	\$1 21	26	\$1 37	35	\$1 27	\$1 16
Handers in	Conn.	31	1	\$ 50	3	\$ 30	4	\$ 40	6	\$ 40	7	\$ 41	10	\$ 50	\$ 42
Handers in	R. I.	32	4	46	4	50	4	50	4	50	8	58	8	60	52
Totals and averages		63	5	\$ 48	7	\$ 40	8	\$ 45	10	\$ 45	15	\$ 49	18	\$ 55	\$ 47

# RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employees.	1886 Employees.	1886 Employees.	1887 Employees.	1887 Employees.	1888 Employees.	1888 Employees.	1889 Employees.	Average per Diem.					
Loom fixtures....	Woolen goods.....	Conn.	38	1	\$1 75	1	\$2 00	8	\$1 81	8	\$2 02	3	\$2 20	17	\$2 09	\$1 97
Loom fixtures....	Woolen goods.....	Mass.	54	1	1 25	3	1 53	16	1 83	6	1 71	13	1 92	15	2 02	1 71
Totals and averages .....			92	2	\$ 1 50	4	\$1 76	24	\$1 82	14	\$1 86	16	\$2 06	32	\$2 05	\$1 84
Pieces .....	Woolen goods.....	Conn.	36	2	\$ 70	2	\$ 77	2	\$ 77	18	\$ 84	6	\$ 94	6	\$1 00	\$ 83
Second hand.....	" .....	Conn.	19	1	87	4	98	4	1 62	2	1 25	4	1 73	4	1 75	1 36
Second hand.....	" .....	R. I..	38	6	1 11	6	1 36	6	1 96	6	1 44	8	1 96	6	1 71	1 59
Totals and averages .....			57	7	\$ 99	10	\$1 17	10	\$1 79	8	\$1 34	12	\$1 84	10	\$1 73	\$1 47
Shearers .....	Woolen goods.....	Conn.	47	1	\$ 65	6	\$ 79	6	\$1 34	10	\$1 29	8	\$1 35	15	\$1 35	\$1 12
Shearers .....	Woolen goods.....	R. I..	25	2	1 00	2	1 00	6	1 25	6	1 00	3	1 11	6	1 11	1 07
Totals and averages .....			72	4	\$ 82	8	\$ 89	12	\$1 29	16	\$1 14	11	\$1 23	21	\$1 22	\$1 09
Sorters .....	Woolen goods.....	Conn.	31	1	\$2 00	2	\$1 96	7	\$2 22	10	\$2 02	4	\$2 26	7	\$2 03	\$2 08
" .....	" .....	R. I..	22	2	1 00	2	1 33	4	1 50	4	1 57	6	1 37	4	1 50	1 37
" waste .....	" .....	R. I..	12	2	83	2	1 00	2	1 05	2	1 25	2	1 37	2	1 37	1 14
Totals and averages .....			65	5	\$1 27	6	\$1 43	13	\$1 59	16	\$1 61	12	\$1 66	13	\$1 63	\$1 53

Burlers.....	Woolen goods.....	Conn.	70	2	\$50	2	\$66	4	\$83	4	\$83	28	\$82	30	\$1 10	\$79
Burlers.....	Woolen goods.....	R. I..	175	6	50	13	54	36	81	44	78	38	72	38	75	68
Totals and averages.....			245	8	50	15	60	40	82	48	80	66	77	68	92	73
Card cleaners.....	Woolen goods.....	Conn.	53	2	62	9	71	9	1 06	16	85	7	91	10	1 18	88
".....	".....	Mass.	74	7	71	13	92	18	1 19	5	1 05	13	1 11	18	1 20	1 03
".....	".....	R. I..	118	4	88	10	75	24	1 00	24	88	26	94	30	1 00	90
Totals and averages.....			245	13	73	32	79	51	1 08	45	92	46	98	58	1 12	93
Card tenders.....	Woolen goods.....	Conn.	53	3	55	11	63	12	64	12	60	2	1 00	13	86	71
".....	".....	Mass.	186	30	35	70	55	27	71	24	74	14	80	21	76	65
".....	".....	R. I..	39	9	58	6	50	6	83	6	72	6	61	6	61	64
Totals and averages.....			278	42	49	87	56	45	72	42	68	22	80	40	74	66
Cloth inspectors.....	Woolen goods.....	Conn.	13	2	90	2	1 00	2	1 50	3	1 61	2	1 75	2	1 90	1 44
Cloth inspectors.....	Woolen goods.....	R. I..	10	1	1 00	1	1 25	2	1 25	2	1 32	2	1 75	2	1 50	1 34
Totals and averages.....			23	3	95	3	1 12	4	1 37	5	1 46	4	1 75	4	1 70	1 39
Drawers in.....	Woolen goods.....	Conn.	26	1	58	3	74	3	1 25	4	1 40	4	2 11	11	1 89	1 32
Drawers in.....	Woolen goods.....	R. I..	11	1	1 04	2	1 04	2	1 25	2	1 50	2	2 25	2	1 80	1 46
Totals and averages.....			37	2	81	5	89	5	1 25	6	1 45	6	2 18	13	1 84	1 39

# RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employers.	1866 Employers.	1866 Per Diem.	1863 Employers.	1863 Per Diem.	1870 Employers.	1870 Per Diem.	1877 Employers.	1877 Per Diem.	1884 Employers.	1884 Per Diem.	1891 Employers.	1891 Per Diem.
Dressers in.....	Woolen goods.....	Conn.	34	1	\$ 75	1	\$1 10	2	\$1 62	6	\$1 75	10	\$1 45	14	\$1 61
" .....	" .....	R. I. .	38	4	1 00	4	92	8	1 75	8	1 75	6	1 52	8	1 67
Totals and averages.....			72	5	87	5	1 01	10	1 68	14	1 75	16	1 48	22	1 64
Dyers .....	Woolen goods.....	Conn.	84	2	75	2	75	6	1 40	14	1 27	22	1 26	38	1 26
" .....	" .....	Mass.	140	42	64	46	77	17	1 12	4	1 00	9	1 20	22	1 16
" .....	" .....	R. I. .	12	2	1 06	2	1 22	2	1 33	2	1 12	2	1 28	2	1 50
Totals and averages.....			236	46	81	50	91	25	1 24	20	1 13	33	1 25	62	1 31
Yarn carriers .....	Woolen goods.....	Conn.	12	1	62	1	83	2	1 25	4	1 37	2	1 85	2	1 85
" .....	" .....	Mass.	43	8	60	8	61	12	79	1	90	4	97	10	1 02
Totals and averages.....			55	9	62	9	72	14	1 02	5	1 13	6	1 41	12	1 43
Weavers .....	Woolen goods.....	Conn.	828	15	47	59	1 20	61	1 25	148	1 25	219	1 39	326	1 63
" .....	" .....	Mass.	57	6	63	6	50	9	74	12	77	12	81	12	84
" .....	" .....	R. I. .	546	40	72	41	93	90	1 23	128	1 30	120	1 30	127	1 35
Totals and averages.....			1,431	61	60	106	87	160	1 07	288	1 10	351	1 16	465	1 27

Spoolers.....	Conn	104	3	\$ 46	5	\$ 79	9	\$ 72	17	\$ 81	27	\$ 83	43	\$ 76	\$ 72
Spoolers.....	Mass.	53	7	31	19	40	5	65	1	60	10	60	11	60	52
Totals and averages.....		157	10	38	24	59	14	68	18	70	37	71	54	68	62
Spinners.....	Conn	84	5	87	23	1 26	21	1 74	6	1 53	10	1 20	19	1 29	1 31
Spinners.....	R. I.	116	14	95	18	1 00	19	1 33	20	1 30	23	1 29	22	1 28	1 19
Totals and averages.....		200	19	91	41	1 13	40	1 53	26	1 41	33	1 24	41	1 28	1 25
Over's rs c'rdg dept.	Mass.	12	2	3 00	2	3 00	2	3 00	2	4 50	2	4 50	2	4 00	3 66
"	Mass.	12	2	2 00	2	2 00	2	2 04	2	2 72	2	3 25	2	5 00	2 83
"	Mass.	12	2	2 50	2	2 50	2	3 00	2	3 00	2	5 00	2	5 00	3 50
"	N. Y.	12	2	2 00	2	1 75	2	2 50	2	1 87	2	2 25	2	2 25	2 10
Totals and averages.....		48	8	2 37	8	2 31	8	2 63	8	3 02	8	3 75	8	4 06	3 02
Over's rs cloth ro'm	Mass.	12	2	2 25	2	1 00	2	2 75	2	2 50	2	2 50	2	3 00	2 50
"	Mass.	11	1	1 75	2	1 75	2	3 00	2	2 72	2	3 25	2	4 00	2 74
"	Mass.	12	2	1 25	2	1 50	2	1 75	2	2 50	2	3 00	2	4 00	2 33
Totals and averages.....		35	5	1 75	6	1 75	6	2 50	6	2 57	6	2 91	6	3 66	2 52
Over's rs dr's g dept	Mass.	12	2	2 50	2	3 00	2	3 00	2	3 50	2	5 30	2	5 30	3 76
"	Mass.	11	1	2 00	2	2 00	2	2 00	2	2 00	2	3 25	2	4 50	2 62
"	Mass.	14	2	2 00	2	2 50	2	3 00	2	3 00	2	3 00	4	3 12	2 77
Totals and averages.....		37	5	2 16	6	2 50	6	2 66	6	2 83	6	3 84	8	4 30	3 08

## RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employees.	1856 Employees.	1863 Employees.	1866 Employees.	1877 Employees.	1884 Employees.	1891 Employees.	Average per Diem.
Or's rs spin. dept.	Cotton goods.	Mass.	18	2 \$3 00	2 \$3 00	2 \$4 00	4 \$3 75	4 \$4 13	4 \$4 00	\$3 64
"	"	Mass.	16	2 2 25	2 2 00	2 1 75	2 3 00	4 4 00	4 5 50	3 08
"	"	Mass.	15	2 2 50	1 2 50	2 3 00	2 5 00	4 4 00	4 4 00	3 50
"	"	N. Y.	18	4 1 75	4 1 61	4 2 50	2 1 87	2 2 25	2 2 25	2 04
Totals and averages.			67	10 2 37	9 2 28	10 2 81	10 3 40	14 3 59	14 3 93	3 06
Or's rs weav. dept.	Cotton goods.	Mass.	48	8 2 06	8 2 12	8 3 37	8 3 35	8 2 00	8 4 00	2 80
"	"	Mass.	11	1 2 00	2 2 00	2 3 25	2 3 00	2 4 75	2 5 00	3 33
"	"	Mass.	14	4 2 25	2 2 50	2 2 50	2 2 00	2 4 00	2 5 00	3 04
"	"	N. Y.	12	2 2 25	2 1 50	2 3 00	2 2 17	2 2 75	2 3 00	2 44
Totals and averages.			85	7 2 14	6 2 03	6 3 03	6 2 60	6 3 37	6 4 25	2 90
Pickers	Cotton goods.	Mass.	98	16 71	18 1 03	22 1 21	24 95	8 1 04	10 1 06	1 00
"	"	Mass.	63	5 66	2 83	10 1 16	10 83	20 1 07	16 1 04	93
"	"	Mass.	83	17 89	4 90	16 1 48	16 1 23	14 1 18	16 1 11	1 13
"	"	N. Y.	18	4 66	4 64	4 1 50	2 75	2 1 00	2 1 50	1 09
Totals and averages.			266	42 73	28 85	52 1 34	52 94	44 1 19	44 1 18	1 03

Scrubbers.....	Cotton goods.....	Mass.	80	8	45	8	50	14	70	14	44	18	59	18	69	56
Second hands.....	".....	"	128	22	1 47	20	1 37	26	2 03	20	1 62	18	1 67	22	1 98	1 69
".....	".....	"	71	3	1 30	2	1 16	11	1 51	10	1 67	22	1 97	23	2 01	1 60
".....	".....	"	123	18	1 35	9	1 42	30	1 09	40	1 91	14	1 76	12	2 12	1 60
".....	".....	N. Y.	60	10	1 15	10	1 18	10	1 97	10	1 44	10	1 39	10	1 59	1 45
Totals and averages.....			382	53	\$1 31	41	\$1 28	77	\$1 65	80	\$1 66	64	\$1 69	67	\$1 92	\$1 58
Spoolers.....	Cotton goods.....	Mass.	434	90	\$ 60	90	\$ 52	68	\$ 92	28	\$ 65	60	\$ 72	98	\$ 73	\$ 69
".....	".....	"	134	3	37	3	37	18	67	14	80	37	93	59	85	66
".....	".....	"	140	1	65	17	36	26	79	35	69	26	76	35	84	68
Totals and averages.....			708	94	\$ 40	110	\$ 31	112	\$ 59	77	\$ 53	123	\$ 60	192	\$ 60	\$ 50
Beam carriers.....	Cotton goods.....	Mass.	20	2	\$ 83	2	\$1 08	4	\$1 33	4	\$1 03	4	\$1 00	4	\$1 02	\$1 05
Back boys.....	Cotton goods.....	Mass.	202	21	\$ 22	28	\$ 39	34	\$ 54	40	\$ 46	48	\$ 39	30	\$ 53	\$ 42
Back boys.....	Cotton goods.....	Mass.	87	6	45	16	40	1	58	6	38	16	41	42	57	46
Totals and averages.....			289	28	\$ 33	44	\$ 39	35	\$ 56	46	\$ 42	64	\$ 40	72	\$ 55	\$ 44
Balers.....	Cotton goods.....	Mass.	12	2	\$ 83	2	\$1 08	2	\$1 50	2	\$1 10	2	\$1 10	2	\$1 05	\$1 11
Balers.....	Cotton goods.....	Mass.	30	20	90	2	1 00	2	1 50	2	1 40	2	1 40	2	1 40	1 26
Totals and averages.....			42	22	\$ 86	4	\$1 08	4	\$1 50	4	\$1 25	4	\$1 25	4	\$1 22	\$1 18
Spoolers.....	Cotton goods.....	N. Y.	103	20	\$ 42	14	\$ 39	25	\$ 60	16	\$ 60	16	\$ 75	12	\$1 00	\$ 63

# RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Continued.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employers.	1866. Employees.	1863. Employees.	1870. Employees.	1877. Employees.	1884. Employees.	1891. Employees.	Average per Diem.
Sweepers.....	Cotton goods.....	Mass.	137	2 \$0 71	6 \$0 69	36 \$0 55	34 \$0 40	24 \$0 42	35 \$0 66	\$0 57
".....	".....	Mass.	57	2 38	3 50	12 82	17 68	9 75	14 68	64
Totals and averages.....			194	4 55	9 59	48 69	51 54	33 59	49 67	60
Third hands.....	Cotton goods.....	Mass.	196	34 98	18 1 00	30 1 46	28 1 22	38 1 23	48 1 64	1 26
".....	".....	Mass.	54	8 1 09	4 1 04	8 1 70	2 1 83	22 1 61	10 1 88	1 52
Totals and averages.....			250	42 1 05	22 1 02	38 1 58	30 1 52	60 1 42	58 1 76	1 39
Wipers.....	Cotton goods.....	Mass.	26	2 33	4 58	4 50	4 54	6 70	6 85	58
Yard hands.....	Cotton goods.....	Mass.	36	8 1 00	6 1 22	6 1 50	6 95	4 1 10	6 1 15	1 15
".....	".....	Mass.	203	9 80	27 89	47 1 50	30 1 15	53 1 07	37 1 09	1 08
".....	".....	N. Y.	45	4 1 00	4 90	12 1 50	9 1 12	8 1 17	8 1 28	1 16
Totals and averages.....			284	21 93	37 1 00	65 1 50	45 1 07	65 1 11	51 1 17	1 13
Yarn carriers.....	Cotton goods.....	Mass.	30	4 67	6 50	8 91	8 68	2 63	2 80	70



Weavers..... (6, 7 and 8 looms)	N. Y.	198	24	\$ 90	45	\$ 70	43	\$ 23	15	\$ 1 06	28	\$ 1 18	43	\$ 1 16	\$ 1 04
"	Mass.	396	27	46	21	54	81	94	67	80	101	97	99	1 05	79
Totals and averages		594	51	68	66	62	124	1 08	82	93	129	1 08	142	1 10	92
Beltmn ..	Mass.	12	2	1 33	2	1 67	2	2 75	2	1 98	2	2 15	2	2 10	2 00
Spinners	N. Y.	166	30	41	30	39	30	56	30	60	30	71	16	1 00	61
"	Mass.	130	1	96	11	77	34	83	27	61	31	75	26	84	79
Totals and averages		296	31	68	41	58	64	69	57	60	61	73	42	92	70
Bobbin men	Mass.	38	4	1 41	2	1 75	8	2 37	8	1 62	8	1 75	8	2 00	1 82
Card grinders	Mass.	60	14	99	6	1 13	12	1 82	8	1 27	8	1 40	12	1 92	1 42
"	Mass.	35	5	85	4	91	6	1 55	4	1 25	8	1 47	8	1 46	1 25
"	Mass.	67	28	85	1	88	10	1 56	16	1 39	4	1 40	8	1 52	1 26
"	N. Y.	16	4	91	4	1 00	2	1 68	2	1 33	2	1 41	2	1 50	1 31
Totals and averages		178	51	90	15	98	30	1 65	30	1 31	22	1 42	30	1 60	1 31
Card strippers	Mass.	84	14	71	12	1 00	24	1 16	6	73	18	95	10	1 31	97
"	Mass.	30	1	60	1	60	4	1 08	4	77	10	95	10	1 00	83
"	Mass.	92	9	80	3	75	30	1 36	32	1 14	8	95	10	1 02	1 00
"	N. Y.	34	8	67	8	66	8	1 25	4	1 18	4	1 12	2	1 21	1 01
Totals and averages		240	32	69	24	75	66	1 21	46	95	40	99	32	1 13	95

# RATES OF WAGES, PER DIEM, FOR 35 YEARS—1856-1891.—Concluded.

OCCUPATIONS.	INDUSTRY.	State Reporting.	Total Number Different Employers.	Employees.	1856	Employees.	1863	Employees.	1869	Employees.	1877	Employees.	1884	Employees.	1891	Average per Diem.
Dockers .....	Cotton goods.....	Mass.	296	62	\$ 25	60	\$ 38	70	\$ 68	34	\$ 52	38	\$ 50	32	\$ 83	\$ 52
" .....	" .....	Mass.	68	5	29	5	40	5	54	9	48	20	63	24	68	50
" .....	" .....	Mass.	191	57	32	13	29	18	54	18	45	40	39	45	66	44
" .....	" .....	N. Y.	34	6	54	6	46	6	79	6	66	6	66	4	89	66
Totals and averages .....			589	130	35	84	38	99	64	67	53	104	54	105	76	53
Double tenders.....	Cotton goods.....	Mass.	40	6	40	8	75	10	88	12	56	2	56	2	1 00	69
Double tenders.....	Cotton goods.....	N. Y.	40	8	44	8	41	8	75	8	54	4	66	4	73	59
Totals and averages .....			80	14	42	16	58	18	82	20	55	6	61	6	86	64
Miner .....	Anthracite coal .....	Pa. ....	3564	--	1 08	--	1 83	--	2 52	--	1 63	3564	1 88	--	1 91	1 81
" .....	Anthra'te and bitum's. ....	U. S. ....	--	--	--	--	--	--	--	--	--	--	--	--	--	2 40
" .....	Bituminous coal .....	Pa. ....	--	--	2 00	--	3 00	--	4 00	--	3 00	--	3 25	--	3 50	3 12
Puddler .....	Bar iron .....	Pa. ....	--	--	2 67	--	3 73	--	4 27	--	3 15	--	3 46	--	3 67	3 49
Puddler .....	Bar iron .....	Pa. ....	--	--	2 88	--	3 48	--	4 14	--	2 50	--	2 50	--	2 91	3 07
Totals and averages .....			--	--	2 76	--	3 61	--	4 20	--	2 82	--	2 98	--	3 29	3 28

Puddlers helpers..	Pa..	---	\$1 44	---	\$1 74	---	2 07	---	1 25	---	1 25	---	1 46	1 54
Puddlers helpers..	Pa..	---	1 33	---	2 00	---	2 90	---	1 96	---	2 15	---	2 29	2 10
Totals and averages.....		---	1 38	---	1 87	---	2 48	---	1 60	---	1 70	---	1 88	1 82
Iron rollers.....	Pa..	---	3 48	---	4 40	---	4 50	---	3 60	---	3 15	---	3 83	3 83
Mining.....	Pa..	---	1 00	---	1 43	---	1 82	---	1 00	---	1 10	---	1 30	1 27
".....	Pa..	---	1 00	---	1 10	---	1 65	---	1 37	---	1 80	---	1 82	1 46
".....	N. Y.	---	1 25	---	1 40	---	2 05	---	1 50	---	1 65	---	1 65	1 58
".....	N. J.	---	1 00	---	1 25	---	1 62	---	1 00	---	1 10	---	1 20	1 20
Totals and averages.....		---	1 06	---	1 27	---	1 78	---	1 22	---	1 41	---	1 49	1 37
Glass blowers.....	N. J..	---	4 00	---	3 32	---	5 00	---	4 84	---	4 75	---	5 00	4 48
Glass gatherers.....	N. J..	---	80	---	75	---	2 00	---	2 33	---	3 09	---	3 25	2 04
Bottle blowers.....	N. J..	---	2 25	---	2 25	---	4 87	---	3 56	---	4 87	---	4 87	3 78

## SUMMARY ARRANGED WITH REFERENCE TO OCCUPATIONS.

OCCUPATIONS	No. different employees	1856	1863	1870	1877	1884	1891	Average per diem
Machinists .....	4,163	\$ 1 62	\$ 1 71	\$ 2 61	\$ 2 19	\$ 2 37	\$ 2 40	\$ 2 15
" helpers .....	933	1 09	1 13	1 50	1 54	1 51	1 47	1 37
Moulders .....	1,664	1 64	1 84	2 59	2 21	2 38	2 40	2 18
" helpers .....	475	1 07	1 15	1 52	1 41	1 45	1 45	1 34
Boilermakers .....	534	1 67	1 95	2 39	2 26	2 42	2 51	2 20
" helpers .....	290	1 02	1 06	1 54	1 39	1 44	1 61	1 34
Patternmakers .....	305	1 65	1 88	3 01	2 69	2 56	2 67	2 41
Blacksmiths .....	672	1 62	2 07	2 84	2 62	2 64	2 66	2 42
" helpers .....	527	1 22	1 46	1 99	1 72	1 80	1 84	1 67
Engineers .....	975	1 78	2 00	2 77	2 72	2 64	2 84	2 46
Firemen .....	3,019	1 22	1 39	2 04	1 95	1 97	2 04	1 77
Plumbers .....	83	1 91	2 09	3 53	2 95	3 06	3 00	2 76
Plasterers .....	198	1 68	2 18	4 10	2 22	3 72	3 80	2 98
Tinsmiths .....	124	1 30	1 62	2 29	2 14	2 36	2 43	2 02
Carpenters .....	2,931	1 55	1 89	2 69	2 24	2 53	2 61	2 24
" helpers .....	176	87	1 13	1 37	1 30	1 38	1 33	1 23
" foremen .....	71	2 25	2 50	3 08	3 16	3 60	3 69	3 05

Masons .....	604	1 96	2 36	3 78	3 04	3 40	3 50	3 01
" helpers .....	281	1 00	1 14	1 76	1 47	1 45	1 58	1 40
Bricklayers .....	695	1 78	2 30	4 31	3 00	3 47	3 66	3 09
" helpers .....	461	1 03	1 36	2 27	1 69	2 00	2 05	1 74
" foremen .....	22	2 25	2 68	5 00	4 75	5 00	4 50	4 03
Hod carriers .....	226	88	1 55	1 90	1 41	1 94	2 02	1 61
Steam and gas fitters .....	118	1 98	2 07	2 09	2 05	2 07	1 94	1 96
" helpers .....	12	1 25	88	1 00	95	1 00	1 16	1 04
Painters .....	1104	1 48	1 73	2 50	2 05	2 27	2 43	2 08
Teamsters .....	247	1 14	1 26	1 68	1 55	1 60	1 53	1 47
Stonecutters .....	893	1 84	2 09	3 96	3 10	3 43	3 64	3 01
Marblecutters .....	315	2 24	2 06	3 61	2 60	2 92	3 46	2 85
Quarrymen foremen .....	125	1 47	1 98	2 80	2 59	2 69	2 50	2 34
Quarrymen .....	5389	1 09	1 25	2 01	1 32	1 40	1 61	1 45
Polishers .....	241	1 21	1 21	2 24	1 80	2 02	2 43	1 82
Laborers .....	3223	1 01	1 14	1 57	1 38	1 43	1 45	1 33
Compositors .....	511	1 79	1 94	3 08	2 72	2 43	2 53	2 41
Foremen compositors .....	81	2 44	2 75	3 45	3 41	3 29	3 42	3 13
Pressmen .....	138	1 85	1 98	2 48	2 82	2 37	2 43	2 32
Foremen pressroom .....	31	2 47	2 72	3 33	3 39	3 36	3 38	3 11
Press feeders .....	205	58	64	1 05	98	97	1 16	90
Overseers .....	242	1 56	2 07	2 83	2 56	3 17	3 30	2 58

## SUMMARY—Concluded.

OCCUPATIONS	No. Different Employees	1856	1863	1870	1877	1884	1891	Average per Diem
Woolen mill hands.....	3,545	71	83	1 07	1 05	1 16	1 17	99
Overseers.....	376	2 15	2 17	2 72	2 74	3 49	4 04	2 91
Cotton mill hands.....	3,910	72	80	1 18	94	1 00	1 13	96
Miners (coal).....	158,050	1 08	1 83	2 52	1 63	1 88	1 91	1 81
" (precious metals).....	-----	2 00	3 00	4 00	3 00	3 25	3 50	3 12
Puddlers.....	-----	2 78	3 61	4 20	2 82	2 98	3 29	3 28
" helpers.....	-----	1 38	1 87	2 48	1 60	1 70	1 88	1 82
Iron rollers.....	-----	3 48	4 40	4 50	3 60	3 15	3 83	3 83
Mining (iron).....	21,034	1 06	1 27	1 78	1 22	1 31	1 06	1 28
Glass blowers.....	-----	4 00	3 32	5 00	4 84	4 75	5 00	4 48
" gatherers.....	-----	80	75	2 00	2 33	3 09	3 25	2 04
Bottle blowers.....	-----	2 25	2 25	4 87	3 56	4 87	4 87	3 78
Totals.....	218,199	81 45	94 31	136 93	116 67	126 24	130 36	114 33
Total average.....	-----	1 60	1 85	2 68	2 29	2 47	2 56	2 24

## LOST TIME IN VARIOUS OCCUPATIONS

IN THE UNITED STATES FROM 1870 TO 1894.

OCCUPATIONS	Number of persons	Number days lost	Averages
Compositors .....	922	18,228	20
Pressmen .....	79	2,686	14
Engineers .....	1,805	106,863	59
Engineers' helpers .....	16	5,608	35
Firemen .....	2,795	240,635	86
Teamsters .....	206	12,036	58
Laborers .....	25,613	1,058,433	41
Boiler makers .....	488	8,555	17
Boiler-makers' helpers .....	156	2,439	15
Moulders .....	6,283	265,044	42
Machinists .....	2,784	85,000	30
Blacksmiths .....	1,228	56,533	46
Blacksmiths' helpers .....	250	8,954	36
Pattern-makers .....	171	4,149	24
Steam and gas fitters .....	108	2,551	23
Plumbers .....	58	1,858	32
Coal miners .....	182,708	15,263,640	83
Miners, iron ore .....	15,307	735,650	48
Quarrymen .....	410	26,725	65
Carpenters .....	4,620	228,253	49
Plasterers .....	435	34,049	78
Bricklayers .....	313	26,484	84
Stone masons .....	557	42,344	76
Stone masons' helpers .....	9	789	88
Stone cutters .....	1,372	112,084	82
Hod carriers .....	179	8,970	50
Painters .....	1,800	91,972	51
Tinsmiths .....	683	18,065	26

## LOST TIME—Concluded.

OCCUPATIONS	Number of persons	Number days lost	Averages
Glass blowers .....	3,170	358,852	113
Glass blowers' apprentices .....	35	3,508	100
Glass gatherers .....	264	28,771	109
Puddlers .....	2,088	315,445	151
Puddlers' helpers .....	2,001	164,231	82
Cotton and wool operatives .....	40,225	1,593,258	39
Railway employes .....	4,774	164,287	34
Glass operatives .....	1,772	189,737	107
Iron ore operatives .....	168	11,406	68
Coke oven operatives .....	53	5,321	100
Bituminous coal .....	52	3,688	71
Iron and steel workers .....	1,703	128,541	75
Totals .....	307,660	21,435,842	69.7



SUMMARY  
OF  
Average Incomes and Expenditures  
For 35 Years.

## SUMMARY OF AVERAGE INCOMES AND EXPENDITURES FOR 35 YEARS.

BASED ON TABLES IN SEVENTH ANNUAL REPORT U. S. COMMISSIONER OF LABOR, 1891.

OCCUPATION	Average Days Employed	Average per Diem	Amount	Rent	Fuel and Light	Food	Clothing	All other Expenses	Saved	Year
Machinist .....	282	\$1 62	\$456 84	\$ 69 85	\$30 25	\$205 94	\$ 59 69	\$ 85 11	----	1856
" .....	282	1 71	482 22	73 73	31 93	217 38	69 34	89 84	----	1863
" .....	282	2 61	736 02	114 82	39 01	286 24	120 19	166 93	8 83	1870
" .....	282	2 19	617 58	95 97	36 19	254 32	97 95	133 15	----	1877
" .....	282	2 37	668 34	103 86	39 17	275 22	106 00	144 09	----	1884
" .....	282	2 40	676 80	105 17	39 66	278 71	107 34	145 92	----	1891
Total Averages .....	282	2 15	666 30	94 22	35 53	249 67	96 16	130 72	----	----
Machinists' Helpers .....	280	1 09	305 20	45 72	21 43	139 14	43 15	55 76	----	1856
" .....	280	1 13	316 40	47 40	22 22	144 25	44 74	57 79	----	1863
" .....	280	1 50	420 00	64 21	27 80	189 34	60 40	78 25	----	1870
" .....	280	1 54	431 20	65 93	28 55	194 38	62 01	80 33	----	1877
" .....	280	1 51	422 80	64 65	27 99	190 60	60 80	78 76	----	1884
" .....	280	1 47	411 60	62 93	27 25	185 55	59 19	76 68	----	1891
Total Averages .....	280	1 37	383 60	57 46	26 93	174 88	54 24	70 09	----	----

Moulders.....	271	\$1 64	\$444 44	\$57 95	\$59 43	\$200 36	\$63 90	\$82 80	1856
"	271	1 84	498 64	76 24	33 01	224 79	71 70	92 90	1863
"	271	2 59	701 89	109 50	37 20	272 97	114 62	159 18	1870
"	271	2 21	598 91	90 73	39 53	262 57	91 45	114 63	1877
"	271	2 38	644 98	100 22	37 80	265 60	102 30	139 06	1884
"	171	2 40	650 40	101 07	38 12	267 83	103 15	140 23	1891
Total averages	271	2 18	590 78	89 50	38 99	259 00	90 21	113 08	----
Boilermakers	296	1 67	494 32	75 58	32 72	222 85	71 08	92 09	1856
"	296	1 95	577 20	87 45	38 10	253 04	88 14	110 48	1863
"	296	2 39	708 04	110 45	37 53	275 36	115 62	160 58	1870
"	296	2 26	668 96	103 96	39 20	275 47	106 10	144 23	1877
"	296	2 42	716 32	111 75	37 96	278 57	116 98	162 46	1884
"	296	2 51	742 96	115 90	39 38	288 94	121 33	168 50	1891
Total averages	296	2 20	651 20	101 20	38 16	268 16	103 28	140 40	----
Boilermaker helpers	298	1 02	303 96	45 53	21 34	138 58	42 98	55 53	1856
"	298	1 06	315 88	47 32	22 17	144 01	44 67	57 71	1863
"	298	1 54	458 92	70 16	30 38	206 88	66 00	85 50	1870
"	298	1 39	414 22	63 33	27 42	186 73	59 56	77 18	1877
"	298	1 44	429 12	65 61	28 41	193 45	61 71	79 95	1884
"	298	1 61	479 78	73 36	31 76	216 28	69 00	89 38	1891
Total averages	298	1 34	399 32	68 99	32 00	209 10	65 09	94 14	----

## SUMMARY OF AVERAGE INCOMES AND EXPENDITURES FOR 35 YEARS.—Cont.

BASED ON TABLES IN SEVENTH ANNUAL REPORT U. S. COMMISSIONER OF LABOR, 1891.

OCCUPATION	Average Days Employed	Average Per Diem	Amount	Rent	Fuel and Light	Food	Clothing	All other Expenses	Saved	Year
Patternmakers	289	165	\$476 85	\$ 72 91	\$31 57	\$214 96	\$ 68 57	\$ 88 84	.....	1856
"	289	188	543 32	82 31	35 86	238 19	82 96	104 00	.....	1863
"	289	301	869 89	139 97	45 67	331 34	131 27	197 29	24 35	1870
"	289	269	777 41	121 28	41 20	302 33	126 95	176 32	9 33	1877
"	289	256	739 84	115 42	39 21	287 72	120 82	167 80	8 87	1884
"	289	267	771 63	120 37	40 90	300 08	126 01	175 01	9 26	1891
Total averages	289	241	696 49	108 23	40 81	286 81	110 46	150 18	.....	.....
Blacksmiths	267	162	432 54	66 14	28 63	194 99	62 20	80 58	.....	1856
"	267	207	552 69	83 73	36 48	242 30	84 40	105 78	.....	1863
"	267	284	758 28	118 29	40 19	294 90	123 83	171 98	9 09	1870
"	267	262	699 54	108 71	40 99	288 07	110 95	150 82	.....	1877
"	267	264	704 88	109 96	37 36	274 13	115 11	159 87	8 45	1884
"	267	266	710 22	110 79	37 64	276 21	115 98	161 08	8 52	1891
Total averages	267	241	643 47	100 82	38 01	267 18	102 91	139 89	.....	.....

Blacksmith's helpers	277	\$1 22	\$337 94	\$50 62	\$23 72	\$154 08	\$47 78	\$ 61 74	1856
"	277	1 46	404 42	61 84	26 77	182 31	58 16	75 34	1863
"	277	99	551 23	83 51	36 38	241 66	84 17	105 51	1870
"	277	1 72	476 44	72 86	31 54	214 78	68 51	88 76	1877
"	277	1 80	498 60	76 24	33 01	224 77	71 70	92 88	1884
"	277	1 84	509 68	77 22	33 64	223 44	77 83	97 55	1891
Total Averages	277	1 67	462 59	70 73	30 62	208 54	66 52	86 18	---
Engineers	254	\$1 78	\$452 12	\$69 13	\$29 93	\$203 82	\$65 01	\$ 84 23	1856
"	254	2 00	508 00	76 96	33 53	222 71	77 57	97 23	1863
"	254	2 77	703 58	109 76	37 28	273 64	114 89	159 57	1870
"	254	2 72	690 88	107 36	40 48	284 50	109 57	148 95	1877
"	254	2 64	670 56	104 21	39 29	276 14	106 35	144 57	1884
"	254	2 84	721 36	112 53	38 23	286 54	117 80	163 60	1891
Total Averages	254	2 46	624 84	97 10	36 62	257 31	99 10	134 71	---
Firemen	277	\$1 22	\$276 94	\$40 57	\$20 91	\$122 57	\$39 69	\$ 53 20	1856
"	227	1 39	315 53	47 28	22 15	143 85	44 61	57 64	1863
"	227	2 04	463 08	70 80	30 66	208 76	66 59	86 27	1870
"	227	1 95	442 66	67 68	29 30	199 55	63 65	82 47	1877
"	227	1 97	447 19	68 38	29 60	201 59	64 31	83 31	1884
"	227	2 04	463 08	70 80	30 66	208 76	66 59	86 27	1891
Total Averages	227	1 77	401 79	61 43	26 60	181 13	57 78	74 85	---

## SUMMARY OF AVERAGE INCOMES AND EXPENDITURES FOR 35 YEARS.—Cont.

BASED ON TABLES IN SEVENTH ANNUAL REPORT U. S. COMMISSIONER OF LABOR, 1891.

OCCUPATION	Average Days Employed	Average Pay per Diem	Amount	Rent	Fuel and Light	Food	Clothing	All other Expenses	Saved	Year
Plumbers	280	\$1 91	\$534 80	\$81 02	\$35 30	\$224 46	\$81 66	\$102 36	---	1866
"	280	2 09	585 20	88 66	38 62	256 55	89 36	112 01	---	1863
"	280	3 53	988 40	147 86	46 85	339 42	166 45	224 17	\$63 65	1870
"	280	2 95	826 00	132 90	43 37	314 62	124 64	187 34	23 13	1877
"	280	3 06	856 80	137 86	44 98	326 36	129 29	194 32	23 99	1884
"	280	3 00	840 00	135 16	44 10	319 95	126 76	190 51	23 52	1891
Total averages	280	2 76	772 80	120 56	40 96	300 54	126 21	175 26	9 27	---
Plasterers	235	1 68	394 80	59 14	27 71	180 00	55 82	72 13	---	1866
"	235	2 18	512 30	77 61	33 81	224 59	78 24	98 05	---	1863
"	235	4 10	963 50	144 14	45 67	330 87	162 25	218 52	62 05	1870
"	235	2 22	531 70	79 04	34 43	228 72	79 66	99 85	---	1877
"	235	3 72	874 20	140 66	45 90	332 98	131 92	198 27	24 47	1884
"	235	3 80	893 00	143 68	46 88	340 14	134 75	202 53	25 00	1891
Total averages	235	2 95	693 25	107 73	40 63	285 48	109 95	149 46	---	---



## SUMMARY OF AVERAGE INCOMES AND EXPENDITURES FOR 35 YEARS.—Cont.

BASED ON TABLES IN SEVENTH ANNUAL REPORT U. S. COMMISSIONER OF LABOR, 1891.

OCCUPATION	Average Days Employed	Average Per Diem	Amount	Rent	Fuel and Light	Food	Clothing	All other Expenses	Saved	Year
Bricklayers .....	229	\$1 78	\$407 62	\$ 62 34	\$ 26 98	\$18 77	\$ 58 62	\$ 75 91	---	1856
" .....	229	2 06	526 70	79 80	34 76	230 91	80 43	100 80	---	1863
" .....	229	4 31	987 00	147 66	46 78	338 94	166 21	223 85	\$63 56	1870
" .....	229	3 00	687 00	106 76	40 26	282 90	108 96	148 12	---	1877
" .....	229	3 47	794 63	123 96	42 12	309 03	129 76	180 22	9 54	1884
" .....	229	3 66	838 14	134 85	44 00	319 26	126 48	190 09	23 46	1891
Total averages .....	229	3 09	707 61	110 39	37 50	275 19	115 55	160 49	8 49	
Hodcarriers .....	263	\$ 88	\$231 44	\$33 91	\$17 47	\$102 44	\$33 17	\$44 45	---	1856
" .....	263	1 55	407 65	62 33	26 99	183 77	58 62	75 94	---	1863
" .....	263	1 90	499 70	76 40	33 08	225 26	71 86	93 10	---	1870
" .....	263	1 41	370 83	55 55	26 03	169 06	52 44	67 75	---	1877
" .....	263	1 94	510 22	77 30	33 67	223 68	77 91	97 66	---	1884
" .....	263	2 02	531 26	80 49	35 06	232 91	81 12	101 68	---	1891
Total averages .....	263	1 62	426 06	65 19	28 21	192 11	61 25	79 36	---	



Steam and gas fitters.....		\$1 58	\$4 58 20	\$ 70 06	\$30 33	\$206 56	\$ 65 89	\$ 85 36	1886
" " " "	290	2 07	600 30	93 29	35 18	247 20	95 21	129 42	1863
" " " "	290	2 09	606 10	94 19	35 52	249 59	96 13	130 67	1870
" " " "	290	2 05	594 50	90 07	39 24	260 63	90 77	113 79	1877
" " " "	290	2 07	600 30	93 29	35 18	247 20	95 21	129 42	1884
" " " "	290	1 94	562 60	85 24	37 13	246 64	85 91	107 68	1891
Total averages.....	290	1 97	571 30	86 55	37 70	250 47	87 23	169 35	----
<hr/>									
Painters.....	262	1 48	387 76	58 09	27 22	176 78	54 83	70 84	1886
" " " "	262	1 73	453 26	69 30	30 01	204 33	65 18	84 44	1863
" " " "	262	2 50	655 00	101 79	38 38	269 73	103 88	141 22	1870
" " " "	262	2 05	537 10	81 37	35 45	235 46	82 02	102 80	1877
" " " "	262	2 27	594 74	90 10	39 25	260 74	90 82	113 83	1884
" " " "	262	2 43	636 66	98 93	37 31	262 18	100 98	137 26	1891
Total averages.....	262	2 08	544 96	82 56	35 97	238 91	83 22	104 30	----
<hr/>									
Teamsters.....	255	1 14	290 70	42 59	21 95	128 66	41 66	55 84	1886
" " " "	255	1 26	321 30	48 13	22 56	146 48	45 43	58 70	1863
" " " "	255	1 68	428 40	65 50	28 36	193 12	61 61	79 81	1870
" " " "	255	1 55	395 25	59 21	27 75	180 19	55 89	72 21	1877
" " " "	255	1 60	408 00	62 38	27 01	183 93	58 67	76 01	1884
" " " "	255	1 53	390 15	58 46	27 40	177 85	55 16	71 28	1891
Total averages.....	255	1 47	372 30	55 17	26 14	169 73	52 64	68 02	----

## SUMMARY OF AVERAGE INCOMES AND EXPENDITURES FOR 35 YEARS.—Cont.

BASED ON TABLES IN SEVENTH ANNUAL REPORT U. S. COMMISSIONER OF LABOR, 1891.

OCCUPATION	Average Days Employed	Average Pay per Diem	Amount	Rent	Fuel and Light	Food	Clothing	All other Expenses	Saved	Year
Stonecutters	230	\$1.78	\$424.20	\$93.86	\$28.08	\$191.23	\$61.00	\$79.03	----	1856
"	230	2.00	460.70	73.50	31.82	216.70	69.12	89.56	----	1863
"	230	3.96	910.80	136.26	43.17	312.77	153.38	206.57	\$38.65	1870
"	230	3.10	713.00	111.23	37.79	277.28	116.43	161.71	8.56	1877
"	230	3.43	788.00	127.06	41.42	300.28	118.74	178.93	22.47	1884
"	230	3.64	837.20	131.70	43.95	318.89	126.33	189.88	23.45	1891
Total averages	230	3.01	692.30	107.58	40.57	285.09	109.80	149.26	----	----
Quarrymen	248	1.09	270.32	39.60	20.41	119.64	38.73	51.92	----	1856
"	248	1.25	310.00	46.44	21.76	141.33	43.83	56.64	----	1863
"	248	2.01	498.48	76.22	33.00	224.71	71.68	92.87	----	1870
"	248	1.32	327.36	49.04	22.98	149.24	46.29	59.81	----	1877
"	248	1.40	347.20	52.01	24.37	158.29	49.09	63.44	----	1884
"	248	1.61	399.28	59.82	28.03	182.04	56.46	72.95	----	1891
Total averages	248	1.45	359.40	53.84	25.23	163.85	50.82	65.66	----	----

Labors	272	\$1 01	\$274 72	\$40 25	\$20 74	\$121 58	\$39 37	\$52 78	1856
"	272	1 14	310 08	46 45	21 77	141 37	43 84	56 65	1863
"	272	1 57	427 04	65 29	28 27	192 51	61 41	79 56	1870
"	272	1 38	375 36	56 23	26 35	171 12	53 08	68 58	1877
"	272	1 43	388 96	58 27	27 31	177 32	55 00	71 06	1884
"	272	1 45	394 40	59 09	27 69	179 80	55 77	72 05	1891
Total averages	272	1 33	361 76	54 19	25 40	164 93	51 15	66 09	---
Compositors	293	1 79	544 47	79 46	34 62	229 92	80 09	100 38	1856
"	293	1 94	568 42	83 09	36 20	240 44	83 76	104 96	1863
"	293	3 08	902 44	133 00	42 78	309 93	151 96	204 66	1870
"	293	2 72	796 96	124 33	42 24	309 93	130 15	180 75	1877
"	293	2 43	712 00	111 07	37 74	276 90	116 27	161 48	1884
"	293	2 53	741 29	115 64	39 29	288 26	121 05	168 13	1891
Total averages	293	2 41	707 60	110 39	37 90	275 19	115 55	160 48	8 49
Pressmen	279	1 83	510 57	77 36	33 70	223 82	77 97	97 72	1856
"	279	1 98	552 42	83 69	36 46	242 18	84 36	105 73	1863
"	279	2 48	691 92	107 52	40 55	284 94	109 74	149 17	1870
"	279	2 82	786 78	122 74	41 70	305 98	128 48	178 44	1877
"	279	2 37	661 23	102 76	38 75	272 39	104 87	142 56	1884
"	279	2 43	677 97	105 36	39 73	279 18	107 53	146 17	1891
Total averages	279	2 32	647 28	100 59	37 93	266 55	102 66	139 55	---

OCCUPATION	Average Days Employed	Average per Diem	Amount	Rent	Fuel and Light	Food	Clothing	All other Expenses	Saved	Year
Overseer, mill hands, woolen mills.....	261	\$1 56	\$453 96	\$ 69 42	\$ 30 05	\$204 64	\$ 65 28	\$ 84 57	-----	1866
" " "	291	2 07	602 37	93 61	35 30	248 05	95 54	129 87	-----	1863
" " "	291	2 83	823 53	134 50	43 23	313 70	124 27	186 77	\$23 06	1870
" " "	291	2 56	744 96	116 22	39 48	289 72	121 65	168 95	8 94	1877
" " "	291	3 17	922 47	138 00	43 72	316 78	155 34	209 22	59 41	1884
" " "	291	3 30	960 30	143 66	45 52	329 77	161 71	217 80	61 84	1891
Total averages .....	291	2 58	750 78	117 12	39 79	291 98	122 60	170 28	9 01	----
Overseer, mill hands, cotton mills.....	291	2 15	625 65	97 23	36 66	257 64	99 23	134 89	-----	1866
" " "	291	2 17	631 47	98 13	37 01	260 04	100 15	136 14	-----	1863
" " "	291	2 72	791 52	123 48	41 95	307 82	129 26	179 51	9 50	1870
" " "	291	2 74	797 34	124 39	42 26	310 08	130 21	180 85	9 57	1877
" " "	291	3 49	1015 59	153 56	45 70	352 82	178 03	230 34	55 14	1884
" " "	291	4 04	1175 64	143 79	45 73	360 33	194 10	266 63	165 06	1891
Total averages .....	291	2 88	839 53	135 08	44 08	319 78	126 68	190 40	23 15	----

Mill Hands, Woolen Mills.....	274	\$ 71	\$194 54	\$30 11	\$15 72	\$ 96 57	\$24 94	\$27 20	1856
" ".....	274	83	227 42	33 32	17 17	100 66	32 59	43 68	1863
" ".....	274	107	293 18	42 97	22 12	129 76	42 01	56 32	1870
" ".....	274	1 05	287 70	42 15	21 72	127 33	41 23	55 27	1877
" ".....	274	1 16	317 84	47 61	22 31	144 91	44 94	58 07	1884
" ".....	274	1 17	320 58	48 02	22 50	146 16	45 33	58 57	1891
Total averages.....	274	9 96	213 54	40 07	20 65	121 07	39 20	52 55	---
Mill Hands, Cotton Mills.....	274	\$ 72	\$197 28	\$30 54	\$15 94	\$ 97 03	\$25 29	\$27 58	1856
" ".....	274	80	219 20	32 11	16 55	97 02	31 41	42 11	1863
" ".....	274	1 18	323 32	48 43	22 70	147 40	45 72	59 07	1870
" ".....	274	94	257 56	37 73	19 45	114 00	36 90	49 48	1877
" ".....	274	1 00	274 00	40 14	20 69	121 27	39 26	52 64	1884
" ".....	274	1 13	309 62	46 38	21 74	141 16	43 78	56 56	1891
Total averages.....	274	96	263 04	38 54	19 86	116 42	37 69	50 53	---
Miners, Coal.....	230	1 08	\$248 40	\$36 39	\$18 75	\$109 93	\$35 60	\$47 73	1856
" ".....	230	1 83	420 90	64 36	27 86	189 74	60 53	78 41	1863
" ".....	230	2 52	579 60	87 81	38 25	254 10	88 50	110 94	1870
" ".....	230	1 63	374 90	56 16	26 32	170 92	53 01	68 49	1877
" ".....	230	1 88	432 40	66 11	28 63	194 93	62 18	80 56	1884
" ".....	230	1 91	439 30	67 17	29 08	198 04	63 17	81 84	1891
Total averages.....	230	1 81	416 30	63 65	27 56	187 67	59 86	77 56	---

## SUMMARY OF AVERAGE INCOMES AND EXPENDITURES FOR 35 YEARS.—Cont.

BASED ON TABLES IN SEVENTH ANNUAL REPORT U. S. COMMISSIONER OF LABOR, 1891.

OCCUPATION	Average Days Employed	Average per Diem	Amount	Rent	Fuel and Light	Food	Clothing	All other Expenses	Saved	Year
Ore miners.....	264	\$2 00	\$528 00	\$79 99	\$34 85	\$231 47	\$80 63	\$101 06	.....	1856
".....	264	3 00	792 00	123 55	41 98	308 01	129 33	179 63	9 50	1863
".....	264	3 00	1056 00	159 67	47 52	366 85	185 12	239 50	57 34	1870
".....	264	3 00	792 00	123 55	41 98	308 01	129 33	179 63	9 50	1877
".....	264	3 25	858 00	138 05	45 04	326 81	129 47	194 60	24 03	1884
".....	264	3 50	924 00	138 23	43 80	317 30	155 60	209 56	59 51	1891
Total averages.....	264	3 125	825 00	132 74	43 31	314 24	124 49	187 11	23 11	.....
Puddlers.....	162	2 76	450 36	68 86	29 82	203 02	74	83 90	.....	1856
".....	162	3 61	584 80	88 60	38 60	256 38	89 30	111 92	.....	1863
".....	162	4 20	680 40	105 73	39 87	280 19	107 91	146 70	.....	1870
".....	162	2 82	456 84	69 85	30 25	205 94	65 69	85 11	.....	1877
".....	162	2 98	482 76	73 82	31 96	217 62	69 42	89 94	.....	1884
".....	162	3 29	532 98	80 75	35 18	233 66	81 38	102 01	.....	1891
Total averages.....	162	3 28	531 36	80 50	35 08	232 95	81 13	101 70	.....	.....

## BUREAU OF LABOR STATISTICS.

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Glass blowers.....	200	\$4 00	\$800 00	\$128 72	\$42 00	\$304 72	\$120 72	\$181 44	\$22 40	1856
" ".....	200	3 32	664 00	103 19	38 91	273 44	105 30	143 16	----	1863
" ".....	200	5 00	1,000 00	151 20	45 00	347 40	175 30	226 80	54 30	1870
" ".....	200	4 84	968 00	144 81	45 88	332 41	163 02	219 54	62 34	1877
" ".....	200	4 75	950 00	142 12	45 03	326 23	159 98	215 46	61 18	1884
" ".....	200	5 00	1,000 00	151 20	45 00	347 40	175 30	226 80	54 30	1891
Total averages.....	200	4 48	896 00	144 17	47 04	341 29	135 21	225 79	35 08	----
Glass gatherers.....	204	80	163 20	25 26	13 19	81 01	20 92	22 82	----	1866
" ".....	204	75	153 00	23 68	12 36	75 95	19 62	21 39	----	1863
" ".....	204	2 00	408 00	62 38	27 01	183 93	58 67	76 01	----	1870
" ".....	204	2 33	475 32	72 68	31 47	214 27	68 35	88 55	----	1877
" ".....	204	3 09	630 36	97 96	36 94	259 58	99 98	135 90	----	1884
" ".....	204	3 25	663 00	103 03	38 85	273 03	105 15	142 94	----	1891
Total averages.....	204	2 04	416 16	63 63	27 54	187 61	59 85	77 53	----	----

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.  
IRON ORE.**

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
23	Blacksmith.....	1,884	5,315	\$1 93.5	\$ 447 00
4	Blacksmith's Helper.....	118	1,134	1 72.0	487 00
26	Brakeman.....	3,165	4,973	1 52.0	291 00
2	Brakeman.....	3,132	494	1 64.0	405 00
2	Cagemen.....	68	558	1 67.5	468 00
1	Conductor.....	----	313	1 91.5	600 00
4	Drill Sharpeners.....	394	858	1 68.0	360 00
22	Miners.....	1,844	5,042	1 55.5	357 00
3	Draymen.....	171	768	1 45.5	372 00
34	Engineers.....	2,883	7,759	1 63.5	373 00
1	" Locomotive.....	6	307	2 50.0	767 00
4	" Stationary.....	----	1,295	1 43.5	464 00
4	" and Machinists.....	120	1,132	2 60.0	736 00
35	Firemen.....	4,307	6,648	1 66.5	316 00
1	Firemen, Locomotive.....	15	294	1 50.0	447 00
4	Miners.....	318	934	1 42.5	332 00
17	Foremen.....	1,126	4,195	1 79.0	441 00
2	Carpenter Foremen.....	28	598	2 62.0	783 00
1	Engineer Foremen.....	----	313	2 49.0	780 00
8	Miners.....	439	2,065	2 00.0	516 00
2	Miners' Foremen.....	83	543	1 40.5	382 00
1	Machinist Helper.....	17	296	1 35.0	399 00
1	Lander.....	99	214	1 06.5	228 00
6	Machinists.....	15	1,863	2 26.5	703 00
1	Machinists' Helper.....	1	312	1 30.0	406 00
1	Manager.....	----	316	2 49.5	789 00
8	Mine Boss.....	35	2,469	2 80.0	864 00
1	Mine Boss Assistant.....	27	286	1 34.5	385 00
2	Pumpmen.....	79	547	1 99.0	545 00
1	Wagonmaker.....	15	298	1 45.5	545 00



**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

**IRON ORE—Continued.**

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
1	Watchman .....	-----	340	\$ 1 24.0	\$ 422 00
1	Weighman .....	106	207	1 18.0	244 00
1	Moulder .....	34	279	2 24.5	627 00
1	Moulder helper .....	11	302	1 19.5	361 00
3	Nozzle men .....	87	852	1 44.0	409 00
7	Ore raisers .....	322	1,869	1 35.0	361 00
1	Ore sorter .....	91	222	1 51.0	335 00
1	Pattern maker .....	11	302	2 00.5	605 00
20	Pit boss .....	1,978	4,282	2 16.0	462 00
4	Sieve men .....	-----	1,332	1 35.5	452 00
1	Stone cutter .....	19	294	1 61.0	473 00
1	Surface boss .....	35	278	2 00.5	557 00
2	Timbermen .....	35	591	2 42.5	717 00
11	Tool boys .....	932	2,511	65.0	149 00
2	Wagon makers .....	42	584	1 54.5	452 00
3	Washermen .....	277	662	1 05.0	232 00
3	Watchmen .....	158	781	1 52.0	396 00
1	Conductor .....	39	326	1 64.0	535 00
3	Engineers .....	4	1,091	1 18.5	432 00
1	Engineer .....	-----	383	1 65.0	632 00
1	Watchman .....	98	267	1 69.5	452 00
3	Mine bosses .....	-----	1,095	2 50.5	915 00
1	Stable boss .....	4	361	1 50.0	542 00
8	Stablemen .....	720	2,200	1 12.0	308 00
4	Watchmen .....	442	1,018	1 31.5	334 00

**PIG IRON.**

23	Casthouse men .....	6,718	4,677	1 50.0	305 00
1	Cinder snapper .....	29	336	1 57.0	529 00
11	Cinder snappers .....	-----	4,733	1 81.0	430 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

PIG IRON.—Continued.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
1	Driver.....	116	249	\$1 60.0	\$ 398 00
3	Paddler's helper.....	449	646	1 10 0	237 00
1	Cinder man.....	45	320	1 32.0	423 00
3	Metal carriers.....	413	682	2 37.5	540 00
1	Stack cleaner.....	74	291	1 51.0	440 00
1	Storeman.....	8	357	1 55.0	554 00
4	Coal screeners.....	499	961	1 32.0	317 00
1	Coke cleaner.....	67	298	1 49.5	442 00
1	Teamster.....	73	292	1 06.0	309 00
2	Coke forkers.....	185	545	1 46.0	398 00
1	Coke dust man.....	4	361	1 40.0	506 00
1	Conductor.....	84	281	1 24.5	350 00
7	Drivers.....	1,128	1,427	95.5	195 00
9	Dumpers.....	1,368	1,917	1 31.0	279 00
1	Dumper and laborer.....	171	194	1 50 5	292 00
61	Engineers.....	9,768	12,497	2 13.5	438 00
1	"    chief.....		369	2 77.0	10 50
4	"    dinky.....	422	1,034	1 61.5	420 00
4	"    furnace.....	61	1,399	2 26.0	790 00
1	"    hoisting.....	25	340	1 97.5	671 00
8	"    locomotive.....	1,078	1,842	2 43.5	560 00
1	"    helper.....	149	216	1 79.0	387 00
1	"    and foreman.....	114	251	2 95.0	740 00
3	"    " laborer.....	549	546	2 11.0	384 00
1	"    " machinist.....	44	321	2 97.0	953 00
1	"    " water tender.....	52	313	1 82.0	570 00
1	Wiper.....	34	331	1 14.0	377 00
16	Enginemen helpers.....	5,608	2,232	1 40.0	106 00
25	Coke fillers.....	2,561	6,564	1 47.0	386 00
11	Lime fillers.....	634	2,381	1 55.5	478 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

PIG IRON—Continued.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
23	Ore fillers.....	2,060	6,335	\$1 51.5	\$418 00
80	Top fillers.....	9,952	19,248	1 68.5	406 00
1	Keeper and filler.....	11	354	1 69.0	599 00
1	Metal breaker.....	139	226	2 13.5	482 00
1	Stove tender.....	41	324	2 11.5	685 00
1	Lightman.....	19	346	1 98.0	685 00
9	Machinists.....	518	2,767	2 45.5	754 00
1	Mason.....	79	286	1 98.5	567 00
2	Moulder helpers.....	39	691	1 50.0	518 00
2	Oilers.....	2	728	1 17.5	429 00
2	Ovenmen.....	11	719	1 75.5	631 00
1	Porter.....	61	304	98.0	298 00
1	Sampleman.....	123	242	1 50.0	363 00
2	Sand sifters.....	155	575	1 10.0	317 00
12	Scalemen.....	419	3,961	1 58.0	522 00
33	Slagmen.....	5,455	6,590	1 52.0	304 00
7	Stablemen.....	477	2,078	1 22.0	362 00
1	Teamster.....	-----	393	1 39.0	546 00
19	Stock breakers.....	1,012	5,923	1 38.5	431 00
2	Water tenders.....	88	642	1 67.0	536 00
21	Stockhousemen.....	3,630	4,035	1 51.0	290 00
3	Store keeper.....	377	718	1 57.0	376 00
4	Store tenders.....	538	922	2 22.0	512 00
29	Storemen.....	4,904	5,681	1 73.0	339 00
1	Storeman helper.....	14	351	1 82.5	640 00
3	Timekeepers.....	303	792	1 68.0	444 00
2	Watchmen.....	52	678	1 55.0	526 00
16	Watertenders.....	2,398	3,442	1 81.5	390 00
19	Weighmasters.....	1,470	5,465	1 45.0	418 00
5	Wipers.....	762	1,063	1 53.0	325 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

PIG IRON—Continued.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
3	Yardmasters .....	118	977	\$1 89.0	\$ 615 00
1	Metal carrier .....	69	296	1 65.5	490 00
1	Filler's helper .....	51	314	1 60.0	502 00
38	Fireman .....	6,495	7,375	1 66.5	323 00
2	" loco .....	30	700	1 50.0	525 00
2	" helpers .....	191	539	1 52.5	411 00
1	Flagman .....	146	219	1 55.0	339 00
1	Storekeeper .....	48	317	1 44.5	458 00
33	Foreman .....	2,895	9,150	2 62.0	726 00
1	" iron handlers .....	1	364	2 50.0	910 00
4	" laborers .....	228	1,332	2 24.5	692 00
1	" machinery .....	----	365	4 66.0	1,700 00
4	Founders .....	309	1,151	4 25.0	1,223 00
4	Guttermen .....	203	1,257	1 40.0	440 00
1	Metal carrier .....	133	232	2 38.5	553 00
1	Moulder .....	18	347	1 72.0	597 00
2	Hoister .....	90	640	1 63.0	521 00
1	Hoistler .....	3	362	1 45.5	526 00
2	" and laborers .....	280	450	1 50.0	338 00
13	Hotblastmen .....	1,320	3,425	1 46.0	384 00
1	Scraper .....	26	339	1 59.5	540 00
4	Hotcindersmen .....	599	861	1 41.5	305 00
2	Inclinemen .....	115	615	1 16.5	359 00
5	Car inspectors .....	524	1,301	1 56.0	406 00
1	Iron grader .....	61	394	1 95.5	595 00
1	" keeper .....	53	312	1 72.0	536 00
9	" movers .....	437	2,848	1 51.5	480 00
1	" moulders .....	----	365	1 57.0	573 00
1	" sorter .....	79	286	1 40.0	400 00
41	Keepers .....	-----	11,661	2 05.5	584 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

PIG IRON—Concluded.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
102	Keepers' helpers .....	3,304	20,917	\$1 60.5	\$326 00
1	Scraper .....	18	347	1 60.5	557 00
1	Stockman .....	14	251	1 56.0	392 00
1	Machinists' helper .....	19	346	1 41.5	489 00
2	Stockbreakers .....	61	669	1 31.0	438 00
1	Blacksmith .....	1,870	3,764	2 20.5	461 00
2	Brakemen .....	133	493	1 49.5	368 00
34	Carpenters .....	3,692	6,950	1 99.0	407 00
3	Laborers .....	4	935	82.8	258 06
10	Machinists .....	702	2,428	2 05.0	498 00
1	Railroad boss .....	16	297	2 00.0	594 00
1	Car repairer .....	-----	352	1 60.0	563 00
1	Timekeeper .....	1	312	2 88.5	900 00
1	Trackman .....	18	295	1 40.0	413 00
16	Barrow men .....	2,285	3,555	1 41.0	313 00
1	Coke forker .....	71	294	1 45.0	427 00
5	Barrow fillers .....	344	1,481	1 48.5	439 00
3	Laborers .....	326	769	1 47.0	377 00
9	Blacksmith helpers .....	1,203	2,082	2 19.5	508 00
1	Boiler cleaner .....	36	329	1 87.0	616 00
1	Brakeman .....	119	246	1 38.5	341 00
12	Cagemen .....	1,547	2,833	1 75.0	413 00
1	Cageman's helper .....	32	333	1 58.0	526 00
6	Carpenters .....	877	1,313	2 22.0	486 00

BAR IRON.

1	Foreman .....	-----	314	\$2 86.5	\$900 00
1	Puddler boss .....	93	193	3 41.5	659 00
228	Puddlers .....	38,464	26,744	3 42.5	402 00
287	Puddlers' helpers .....	46,489	34,588	1 68.5	203 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

**BAR IRON—Concluded.**

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
2	Puddler helper.....	184	388	\$2 65.5	\$ 515 00
4	Roller helper.....	252	892	1 39.0	310 00
5	Scrapers.....	171	1,259	4 94.0	1,244 00
10	Scraper helpers.....	342	2,518	2 14.5	540 00
6	Stockers.....	383	1,333	1 58.0	351 00
2	Bricklayers helpers.....	166	406	1 41.0	286 00
7	Engineer.....	552	1,450	1 92.0	398 00
1	Ore crusher.....	52	234	1 39.5	327 00
4	Masons.....	324	820	4 69.5	963 00
3	Masons' helpers.....	353	505	1 49.0	251 00
5	Stockers.....	601	829	1 55.5	258 00
2	Stockers' boss.....	182	390	4 28.0	835 00
1	Toolman.....	54	232	1 37.5	319 00
1	Watchman.....	68	297	1 50.0	446 00
2	Catchers.....	126	446	2 25.0	502 00
2	Heaters.....	100	472	7 03.0	1,659 00
6	Heaters' helpers.....	378	1,338	2 66.5	595 00
2	Rollers.....	125	447	10 77.5	2,408 00
3	Rollers' helpers.....	183	670	2 50	558 00
8	Roughers.....	504	1,784	3 68.5	822 00
2	Shearmen.....	126	446	2 50.5	559 00
4	Shearmen helpers.....	255	889	1 50.0	333 00
2	Strickers in.....	125	447	1 50.0	336 00
6	Straightners.....	378	1,338	1 35.0	301 00

**FINISHED BAR IRON.**

2	Catchers.....	126	446	2 25.0	502 00
2	Heaters.....	100	472	7 03.0	1,659 00
6	Heaters' helpers.....	378	1,338	2 66.5	595 00
2	Rollers.....	125	447	10 77.5	2,408 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.  
STEEL INGOTS.**

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
3	Rollers' helper.....	1,046	670	\$2 50.0	\$ 558 00
8	Roughers.....	504	1,784	3 68.5	822 00
2	Shearmen.....	126	446	2 50.5	559 00
4	Shearmen helpers.....	255	889	1 50.0	333 00
2	Stickers in.....	125	447	1 50.0	330 00
6	Straighteners.....	378	1,338	1 35.0	301 00
2	Blowers.....	77	495	3 51.5	871 00
6	Bottom builder.....	446	1,270	3 60.0	762 00
2	Bottom builder helpers.....	102	470	3 87.5	911 00
1	Grinder.....	---	292	1 80.0	526 00
6	Cinder snapper.....	570	1,146	3 36.0	642 00
1	Cinder tapper.....	117	169	2 24.5	379 00
1	Manganese heater.....	113	173	2 94.0	509 00
1	Cinderman.....	2	284	2 38.5	678 00
3	Metal wheelers.....	295	563	2 44.5	647 00
1	Scrap loader.....	118	168	2 91.0	489 00
1	Vesselman.....	37	249	2 66.5	663 00
2	Coke stokers.....	138	434	3 10.5	674 00
1	Vessel repairer.....	76	210	1 85.0	389 00
4	Coke wheelers.....	363	781	2 79.0	545 00
1	Iron pourer.....	96	190	2 58.0	490 00
1	Craneman.....	122	164	1 67.5	275 00
2	Cupola firemen.....	102	470	6 44.5	1,515 00
2	Cupola helpers.....	76	496	4 22.0	1,046 00
4	Cupola men.....	459	685	3 67.5	630 00
2	Engineers.....	43	529	2 36.0	624 00
3	Engineers, fan.....	106	752	1 79.5	449 00
2	Engineers, grinding.....	---	582	1 85.0	539 00
3	Engineers, locomotive.....	356	502	1 89.5	317 00
2	Foremen pitmen.....	134	438	4 48.5	983 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

STEEL INGOTS.—Continued.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
2	Gas makers .....	25	547	\$1 98.0	\$542 00
3	Gas makers helpers .....	367	491	1 65.5	271 00
4	Greasers .....	475	669	1 84.5	309 00
1	Grinders helper .....	10	276	1 71.5	473 00
1	Metal wheelers .....	62	224	2 36.5	530 00
6	Ingot loaders .....	578	1,138	1 19.5	985 00
1	Moulders capper .....	55	231	4 39.5	1,015 00
1	Moulders swinger .....	112	174	5 42.5	913 00
1	Iron regulator .....	102	184	2 76.5	509 00
1	Iron pourer .....	56	230	4 01.5	923 00
1	Iron pourer .....	15	271	3 73.5	1,012 00
1	Ladle liner .....	114	172	3 01.5	519 00
2	Pushers .....	232	340	2 01.5	343 00
1	Vesselman .....	77	209	6 06.5	1268 00
2	Vesselman helpers .....	111	461	3 69.5	852 00
1	Ladle racker .....	51	235	1 70.0	399 00
1	Loam mixer .....	30	256	1 63.5	418 00
6	Manganese heater .....	.....	1,227	4 23.0	865 00
5	Manganese helper .....	468	962	2 73.0	525 00
23	Metal wheelers .....	2,382	4,196	2 90.0	529 00
1	Mould capper .....	48	238	3 73.0	888 00
2	Pushers .....	251	341	3 46.5	591 00
4	Mould setters .....	221	923	5 31.0	1,225 00
4	Mould swingers .....	256	888	5 31.0	1,179 00
5	Mould washers .....	597	883	1 54.5	258 00
15	Pitmen .....	1,287	3,003	3 58.5	717 00
2	Pitmen and pushers .....	139	433	273.0	1,182 00
2	Vessel cinders .....	132	440	3 06.5	674 00
4	Pushers .....	488	656	2 82.5	463 00
2	Sanders .....	189	403	2 15.5	202 00



TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.

## STEEL INGOTS—Continued.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
20	Regulators .....	2,067	3,653	\$2 36.0	\$431 00
2	Testers .....	76	496	1 67.5	832 00
3	Scrap stockers .....	320	538	2 61.5	469 00
2	Steel pourers .....	112	460	6 57.5	1,512 00
2	Stopper carriers .....	113	459	5 05.0	1,159 00
5	Stopper setters .....	536	904	3 45.5	624 00
1	Vessel cinder .....	80	206	2 94.5	607 00
2	Stopper setters .....	114	458	5 08.5	1,165 00
1	Stopper maker .....	-----	358	2 10.0	751 00
4	Test catchers .....	509	635	1 56.0	248 00
4	Vessel repairers .....	345	799	1 72.0	343 00
9	Vesselmen .....	760	1,814	4 35.5	878 00
2	Water tenders .....	58	514	2 24.5	578 00
6	Weighmasters .....	311	1,405	1 82.0	426 00
6	Engineers .....	567	1,311	2 13.0	465 00
1	Engineer (locomotive) .....	-----	313	3 00.0	939 00
7	Heaters .....	599	1,592	5 05.5	1,150 00
7	Heaters' helpers .....	408	1,783	1 20.5	307 00
1	Mason .....	-----	313	2 75.0	860 00
1	Metal wheeler .....	23	290	1 70.0	493 00
1	Millwright .....	-----	314	3 74.5	1,176 00
5	Rollers .....	229	1,336	4 28.5	1,146 00
1	Roller boss .....	7	306	17 89.0	5,475 00
1	Roller boss helper .....	29	284	1 99.5	566 00
1	Rougher-up .....	15	298	2 60.5	777 00
2	Cranemen .....	209	417	1 10.5	230 00
1	Engineer .....	108	205	1 91.5	393 00
4	Foremen .....	231	1,021	4 55.5	1,163 00
2	Foremen .....	170	456	1 91.5	437 00
1	Foreman mixers .....	56	257	2 65.0	681 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

STEEL INGOTS—Concluded.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
2	Gas makers.....	-----	709	\$ 2 50.0	\$ 887 00
1	Mould inspector.....	121	192	1 25.0	240 00
1	Laborer.....	74	239	1 97.5	472 00
2	Vesselman.....	150	476	2 09.5	499 00
1	Vesselmen tender.....	184	209	1 45.5	304 00
310	Laborers.....	37,510	59,520	1 46.5	281 00
1	Pitman helper.....	36	277	1 64.5	455 00
1	Master mechanic.....	-----	396	3 49.5	1,385 00
5	Mechanics.....	147	1,418	2 02.5	574 00
1	Mechanic's helper.....	87	226	1 52.0	343 00
1	Melter.....	31	282	2 28.5	645 00
2	Pitmen.....	100	526	1 69.5	446 00
2	Foremen converters.....	-----	732	4 73.0	1,731 00
1	Master mechanic.....	46	319	6 58.5	2,100 00
1	Timekeeper.....	38	327	2 58.0	844 00

STEEL BLOOMS.

5	Blacksmiths.....	617	813	2 29.0	453 00
4	Blacksmith helpers.....	430	714	1 85.0	330 00
1	Brakeman.....	19	267	1 64.0	438 00
8	Chargers.....	860	1,428	3 77.0	674 00
1	Cinder wheeler.....	26	260	1 59.0	414 00
7	Drawers.....	424	1,378	3 78.5	853 00
1	Heater's help.....	84	202	2 99.5	605 00
8	Engineers, stationary.....	873	1,415	2 99.0	529 00
1	Engineer, drop.....	55	231	1 59.5	369 00
8	Engineers, locomotive.....	543	1,745	1 97.0	430 00
1	Machinist.....	-----	358	2 89.5	358 00
1	Assistant foreman.....	62	224	1 57.5	353 00
2	Grossers.....	-----	657	1 82.0	598 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

**STEEL BLOOMS—Concluded.**

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
7	Heaters.....	588	1,414	\$ 5 92.5	\$1,197 00
9	Heaters' helpers.....	599	1,975	3 98.5	874 00
14	Hookers up.....	1,600	2,404	4 20.5	722 00
5	Mixers.....	-----	1,452	1 83.5	532 00
2	Pump reversers.....	-----	589	1 64.0	483 00
1	Cupola man.....	32	254	2 49.5	634 00
6	Roll hands.....	555	1,161	2 94.0	569 00
1	Roller hand.....	11	275	3 98.0	1,094 00
4	Rollers.....	190	954	6 40.0	1,526 00
4	Shearmen.....	197	947	4 73.5	1,121 00
21	Shearmen helpers.....	2,302	3,704	3 21.5	567 00
1	Stoppermaker.....	19	267	2 08.5	557 00
7	Water tender.....	672	1,330	2 31.0	439 00
2	Ashmen.....	91	535	2 11.0	565 00
1	Bricklayer.....	123	190	2 50.5	476 00
1	Coal dumper.....	-----	361	1 53.0	552 00
2	Foreman laborers.....	-----	701	2 28.5	801 00
1	Assistant foreman.....	131	182	1 56.0	284 00
1	Foreman.....	2	311	2 25.0	700 00
7	Laborers.....	893	1,298	1 40.0	259 00
17	Machinists.....	1,869	3,452	2 28.0	463 00
6	Machinist' helpers.....	1,198	680	1 80.5	204 00
2	Master Mechanic.....	201	425	3 32.0	706 00
1	Metal worker.....	101	212	3 00.5	637 00
2	Metal worker helpers.....	136	490	2 75.0	674 00
1	Plumber.....	-----	320	1 99.5	639 00
1	Plumber helpers.....	-----	363	1 51.0	548 00
5	Scull breaker.....	367	1,198	1 50.5	360 00
1	Yardman.....	-----	328	2 26.5	743 00
3	Watchmen.....	427	668	1 58.0	352 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

**STEEL BILLETS.**

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
2	Boiler makers' helpers .....	50	576	\$1 66.5	\$480 00
2	Carboners .....	225	401	2 28.0	457 00
1	Charger 7-hooker .....	118	195	2 71.0	528 00
1	Mason help .....	68	245	1 84.5	452 00
1	Conductor .....	87	226	1 57.5	356 00
1	Foreman chippers .....	23	290	3 88.5	1,126 00
1	Laborer—foreman .....	31	282	3 81.0	1,074 00
2	Laborer—mill foreman .....	19	607	5 22.5	1,587 00
1	Inspector .....	93	220	1 93.5	426 00
3	Machinist .....	-----	975	2 25.5	733 00
2	Oilers .....	115	511	1 42.5	364 00
3	Pipe fitter .....	133	806	1 86.0	499 00
5	Screwmen .....	-----	1,720	2 47.5	851 00
1	Water carrier .....	112	201	1 36.5	274 00
1	Weighmaster .....	2	311	2 27.5	311 00
1	Janitor .....	-----	379	49.0	186 00
5	Watchmen .....	191	1,634	1 75.0	573 00

**MIXED IRON AND STEEL.**

1	Acidman .....	21	292	1 50.0	438 00
28	Blacksmiths .....	3,381	5,383	2 80.5	539 00
1	Blacksmith's helper .....	101	212	1 37.5	291 00
5	Boiler tenders .....	-----	1,713	1 71.5	588 00
1	Engineer .....	79	234	1 86.5	436 00
1	Boiler maker's helper .....	85	228	1 00.0	228 00
2	Bolt packers .....	99	527	88.0	233 00
1	Brakeman .....	4	309	1 81.0	559 00
1	Brander .....	11	302	1 70.5	515 00
3	Bundlers .....	258	681	1 72.0	391 00
1	Bundler and laborer .....	87	226	1 63.5	369 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.  
MIXED IRON AND STEEL.—Continued.**

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
5	Shippers .....	309	1,256	\$1 25.0	\$314 00
1	Call boy .....	37	276	1 37.5	380 00
2	Callers .....	-----	723	1 54.0	557 00
2	Cartmen .....	239	387	1 35.5	263 00
1	Cartmen's helper .....	13	300	1 12.5	338 00
1	Catcher .....	108	205	1 41.0	289 00
2	Straighteners .....	240	386	1 97.5	382 00
1	Cleaner .....	77	236	1 50.0	354 00
1	Office cleaner .....	-----	313	57.5	180 00
1	Coke wheelers .....	48	265	1 00.0	265 00
2	Croppers .....	232	394	1 80.5	356 00
6	Drippers .....	89	1,789	2 36.5	706 00
1	Drawer back .....	60	253	1 36.5	345 00
1	Scraper .....	76	237	1 16.0	275 00
2	Drivers .....	-----	747	1 62.0	605 00
47	Engineers .....	3,847	10,864	2 19.0	506 00
2	Chief engineers .....	-----	627	4 06.0	1,273 00
6	Engineers (locomotive) .....	727	1,151	2 70.5	519 00
6	Engineers (rolls) .....	-----	1,902	2 03.5	646 00
1	Shape hammerer .....	9	304	3 07.5	935 00
2	Alley men .....	161	411	1 75.5	206 00
1	Broom man .....	52	234	1 50.5	352 00
2	Catcher's helpers .....	161	411	3 18.0	654 00
4	Chargers .....	-----	1,287	1 72.0	554 00
2	Finishers .....	161	411	3 65.5	751 00
1	Foreman puddlers .....	-----	286	4 09.0	1,170 00
13	Heaters .....	1,251	2,467	6 43.5	1,221 00
3	Heaters' helpers .....	312	546	1 14.5	209 00
7	Poke-ins .....	539	1,463	1 62.5	340 00
3	Puddlers .....	-----	873	2 74.0	797 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

MIXED IRON AND STEEL.—Continued.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
1	Roll turner .....	6	280	\$8 48.5	\$2,376 00
18	Rollers .....	1,778	3,370	7 30.5	1,368 00
18	Roughers .....	915	4,233	3 11.0	732 00
6	Sawyers .....	584	1,132	1 58.0	298 00
1	Scrap wheeler .....	.....	389	1 50.5	586 00
11	Scrapers .....	913	2,233	1 43.0	290 00
33	Shearmen .....	2,845	6,593	1 87.0	374 00
2	Stockers .....	88	484	2 06.5	500 00
1	Stocker, boss .....	21	265	4 21.5	1,117 00
3	Weighmen .....	858	858	1 70.5	488 00
4	Timekeepers .....	364	888	2 38.5	529 00
1	Yardmaster .....	.....	313	2 32.5	727 00
6	Warehousemen .....	450	1,428	1 54.0	367 00
14	Watchmen .....	1,162	3,220	1 65.0	380 00
10	Watertenders .....	533	2,597	1 99.5	518 00
3	Weighmen .....	172	767	1 70.5	436 00
1	Wheelman .....	73	240	1 58.5	380 00
2	Yardmen .....	86	540	2 30.0	621 00
4	Watchmen .....	.....	1,468	1 76.0	647 00
2	Fillers .....	234	392	1 54.5	303 00
33	Firemen .....	3,867	6,462	1 65.5	324 00
1	Furnaceman .....	22	291	4 71.0	1,371 00
1	Shapenhammerman .....	30	283	1 93.5	548 00
1	Foreman .....	20	293	1 94.0	568 00
1	Shearman .....	108	205	1 43.0	293 00
2	Watertenders .....	.....	655	1 76.5	578 00
7	Foremen .....	477	1,714	2 86.0	700 00
2	" blacksmith .....	11	615	4 24.0	1,304 00
2	" boilers .....	78	448	1 99.0	446 00

TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.

MIXED IRON AND STEEL.—Continued.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
1	Foreman Bricklayer .....	-----	313	\$ 43.5	\$1,360 00
1	" coke oven.....	23	290	2 75.0	797 00
6	" laborer .....	440	1,438	2 24.5	538 90
2	" Machinist.....	-----	643	3 20.5	1,030 00
2	" Mill .....	-----	626	7 06.0	2,210 00
1	" Scrap piler.....	82	831	2 75.5	613 00
1	" Shear room.....	7	306	4 25.0	1,300 00
1	" Yard .....	-----	345	2 49.0	859 00
1	Heater .....	6	307	4 43.5	1,362 00
3	Forge cleaners.....	95	844	1 29.0	363 00
8	Gateman .....	299	2,205	1 30.0	358 00
3	Hammer driver.....	110	829	1 63.0	451 00
1	Hammerman .....	83	230	5 52.0	1,270 00
1	Heater help .....	38	275	1 45.5	400 00
1	Hammerman's help .....	50	263	1 40.0	368 00
3	Heaters .....	367	572	2 06.0	392 00
2	Heaters help .....	166	460	1 79.0	412 00
1	Hooker up .....	115	198	1 50.0	297 00
1	Iron tester.....	101	212	1 66.5	353 00
1	Janitor .....	5	308	1 35.0	416 00
1	Lighter up .....	-----	313	2 11.5	662 00
1	Mason helper .....	-----	314	1 39.5	438 00
1	Ore crusher .....	47	226	1 47.5	393 00
1	Reverser .....	86	227	1 59.5	362 00
3	Shearmen .....	303	636	1 35.0	286 00
1	Switchmen.....	7	306	1 77.0	542 00
1	Lineman .....	93	220	1 55.5	342 00
2	Lathemen.....	91	535	1 61.5	432 00
2	Levermen .....	64	562	1 42.5	400 00
1	Machinist .....	48	265	2 70.0	715 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.  
MIXED IRON AND STEEL—Concluded.**

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
1	Roller .....	107	206	\$3 30.5	\$681 00
1	Weighman .....	61	252	2 48.0	625 00
2	Straighteners .....	180	446	3 00.0	669 00
1	Runner .....	6	307	2 49.0	765 00
1	Scrap piler .....	71	242	2 01.0	487 00
1	Hammerman .....	7	306	8 02.5	2,456 00
2	Hammermen's helpers .....	24	602	2 16.5	651 00
6	Shearmen's helpers .....	406	1,472	1 52.5	375 00
2	Sheetfloormen .....	177	449	1 50.0	337 00
17	Shippers .....	1,359	3,962	1 95.0	455 00
1	Stocker boss .....	111	202	2 50.0	505 00
1	Storekeeper .....	18	295	1 45.0	428 00
2	Teamsters .....	182	444	2 96.0	657 00
1	Master Mechanic .....	98	215	3 26.0	701 00
12	Matchers .....	1,340	2,416	1 80.0	362 00
6	Millwrights .....	590	1,288	3 03.0	651 00
4	Millwright's assistants .....	154	1,098	1 87.5	514 00
1	Oilier .....	122	191	1 54.5	295 00
2	Oilroom hands .....	105	521	1 76.0	459 00
2	Ore grinders .....	-----	688	1 59 0	547 00
1	Ore wheeler .....	35	278	1 77.0	492 00
3	Patternmakers .....	296	643	2 59.5	556 00
4	Picklers .....	-----	1,598	1 74.0	695 00
6	Picklers helpers .....	227	1,651	1 55.0	426 00
1	Pitman .....	30	283	1 35.0	382 00
1	Porter .....	-----	356	1 48.0	527 00
1	Puddler .....	109	204	3 20.5	654 00
2	Roll cleaners .....	104	522	1 23.0	321 00
10	Roll turners .....	853	2,277	4 60.0	1,048 00



**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.  
BITUMINOUS COAL.**

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
1	Blacksmith .....	100	213	\$1 83.0	390 00
1	Dumper .....	120	193	1 57.5	304 00
1	Driver boss .....	23	289	2 29.5	663 00
1	Dumper boss .....	105	208	2 20.5	459 00
2	Engineer (hoist) .....	206	420	2 00.5	421 00
1	Engineer and fireman .....	-----	317	1 72.0	545 00
1	Fan man .....	119	194	1 68.0	326 00
2	Fire boss .....	14	612	2 05.0	628 00
1	Fireman .....	50	263	1 69.0	444 00
1	Watchman .....	12	301	1 42.0	428 00
2	Foremen .....	-----	626	3 10.0	970 00
1	Foreman haulers .....	78	235	2 22.0	522 00
3	Tracklayer .....	335	604	2 06.0	414 00
1	Hauler .....	72	241	2 15.0	518 00
1	Oiler .....	51	262	93.0	244 00
18	Roadmen .....	1,288	4,346	1 64.0	397 00
2	Shifters .....	136	490	1 80.0	441 00
1	Slate picker .....	72	241	1 59.5	384 00
1	Trimmer boss .....	41	272	1 88.0	512 00
7	Weighmaster .....	623	1,568	2 17.0	486 00
5	" .....	599	966	1 82.0	352 00
2	Engineers (hoist) .....	-----	730	2 16.0	789 00
1	" and fireman .....	19	346	1 90.0	657 00
3	Fireman .....	328	767	1 67.0	426 00
1	Mine boss .....	-----	365	2 28.0	833 00
2	Stable boss .....	-----	730	1 30.0	474 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.  
COKE.**

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
3	Blacksmiths .....	310	629	\$2 28.5	\$479 00
3	Carpenters .....	280	659	2 19.0	481 00
1	Charger .....	20	293	1 68.5	494 00
1	Drawer .....	104	209	1 52.5	319 00
2	Engineers .....	207	419	2 14.0	449 00
4	Foremen .....	-----	1,253	2 93.0	918 00
5	Foremen's assistants .....	495	1,070	1 95.5	419 00
17	Leveler .....	2,026	3,295	2 25.0	436 00
1	Oven repairer .....	21	292	1 49.5	437 00
1	Watchman .....	-----	350	1 60.0	560 00
8	Chargers .....	901	2,019	1 12.0	283 00
2	Coke bosses .....	203	527	2 15.5	568 00
3	Dumpers .....	290	805	1 28.5	345 00
1	Engineer (stationary) .....	64	301	1 05.0	316 00
3	Foremen .....	354	741	2 50.0	617 00
1	Track laborer .....	-----	373	1 00.0	373 00
1	Loader .....	-----	381	1 00.0	381 00
1	Mortarman .....	151	214	1 00.0	214 00
5	Watchmen .....	756	1,069	1 16.5	248 00

## GLASS.

50	Blacksmiths .....	3,465	12,185	2 28.5	560 85
8	Blacksmiths' helpers .....	388	2,116	2 12.8	298 36
117	Glass blowers .....	13,777	22,844	4 51.6	880 56
1	Glass gatherer .....	93	220	2 66.5	564 30
35	Blower apprentices .....	3,508	7,447	1 86.5	396 82
4	Carpenters .....	67	1,185	2 23.0	660 63
6	Laborers .....	725	1,153	1 43.0	274 77
12	Laborers .....	851	2,905	1 29.0	312 28
10	Laborers .....	603	2,527	1 27.0	320 93
13	Engineers .....	507	3,562	2 18.0	597 12
29	Flatteners .....	2,798	6,279	5 50.0	1,190 84

TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.

GLASS.—Continued.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
4	Flatteners apprentice .....	493	759	\$2 69.5	\$511 37
19	Foremen (labor) .....	807	5,140	2 60.0	703 36
6	Furnacemen .....	588	1,025	2 06.0	351 91
32	Gaffers .....	3,550	5,602	4 00.0	700 25
13	Gatherers .....	1,541	2,528	82.0	159 46
9	Grinders .....	480	2,337	1 47.5	383 00
1	Inspector .....	-----	313	2 40.5	753 00
12	Laborers .....	817	2,939	95.0	232 67
94	" .....	8,566	20,856	1 66.0	368 30
2	" .....	171	455	1 33.0	302 57
2	Machinists .....	185	441	2 81.0	619 60
2	Masons helpers .....	184	442	1 64.5	364 00
54	Mixers .....	4,188	12,714	2 47.0	581 54
15	" .....	1,157	3,538	1 80.0	424 56
10	" helpers .....	609	2,521	1 61.0	405 88
8	Mould makers .....	774	1,730	1 24.0	268 15
41	Packers .....	3,098	9 735	1 82.0	432 14
3	Batch wheelers .....	225	555	2 61.5	484.00
4	Blower bosses .....	312	728	10 68.5	1 945 00
2	Cutters .....	114	406	4 95.5	1 006 00
1	Cutter boss .....	47	213	7 24.5	1 543 00
16	Flatteners .....	1,234	2,926	6 19.5	1 133 00
5	Furnacemen .....	582	718	2 08.0	299 00
1	Gatherer boss .....	77	183	7 57.0	1 385 00
7	Layers in .....	542	1,278	1 76.5	322 00
3	Layers out .....	359	421	1 91.5	269 00
2	Leersmen .....	153	367	1 96.5	361 00
12	Master teasers .....	1,395	1,725	4 53.0	651 00
1	Mixer .....	73	187	2 61.0	488 00
12	Teasers .....	987	2,133	2 33.0	414 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS INDUSTRIES.**

GLASS.—Continued.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
32	Gaffer .....	3,550	5,602	\$ 4 00.5	\$701 00
3	Mould boy .....	249	609	89.0	180 00
15	Batch wheeler .....	1,747	2,948	1 91.5	376 00
3	Filler in .....	277	662	2 03.5	460 00
46	Blacksmith .....	5,676	8,722	2 39.5	454 00
3	Blacksmith and engineer .....	325	614	2 52.5	516 00
1	Blacksmith apprentice .....	49	264	69.5	183 00
8	Blower boss .....	948	1,556	8 25.5	1,606 00
985	Blower .....	121,155	187,150	4 61.0	875 00
1	Blower .....	93	220	2 56.5	564 00
1	Packer .....	100	213	3 84.5	819 00
5	Carrier out .....	605	960	1 30.5	251 00
2	Clay grinder .....	216	410	1 29.5	266 00
1	Potshell picker .....	121	192	1 77.0	340 00
1	Clay tamper .....	80	233	1 43.5	334 00
2	Coal wheeler .....	193	433	1 39.5	303 00
11	Boss cutter .....	983	2,460	7 27.5	1,627 00
1	Engraver .....	73	240	3 33.0	799 00
1	Cutter helper .....	73	240	1 66.5	400 00
1	Demijohn coverer .....	12	301	4 25.0	1,279 00
5	Dipper .....	495	1,070	1 78.5	382 00
16	Engineer .....	1,796	3,212	1 93.5	388 00
1	Engineer chief .....	86	227	2 97.0	674 00
1	Engraver .....	49	264	3 00.0	792 00
4	Flattener apprentice .....	493	739	2 69.5	512 00
9	Foremen .....	578	2,239	3 53.0	878 00
3	Foremen laborer .....	137	802	1 72.5	461 00
2	Foremen yard .....	13	613	2 33.5	715 00
1	Furnaceman .....	6	307	1 96.0	601 00
5	Grinder .....	441	1,124	248.5	558 00

**TABLE SHOWING OCCUPATION,**  
**LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN**  
**VARIOUS INDUSTRIES.**  
 GLASS—Concluded.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
5	Grinder Help.....	187	1,378	62.0	171 00
2	Inspector.....	138	488	2 03.0	495 00
1	Layer Out.....	6	207	1 93.0	337 00
1	Mixer Help.....	-----	223	1 51.0	337 00
2	Lead Burner.....	104	522	2 50.0	652 00
2	Leersmen.....	182	444	2 02.5	449 00
2	Mason Help.....	184	442	1 64.5	364 00
9	Mixer Help.....	542	2,275	1 58.0	399 00
5	Mould Cleaner.....	390	1,175	1 47.5	347 00
1	Mould Makers' Help.....	58	255	95 0	242 00
10	Pacer Boss.....	908	2,222	2 88.0	640 00
18	Pot Maker.....	1,069	4,565	2 90.5	736 00
10	Potshell picker.....	1,152	1,979	1 72.5	342 00
13	Pressmen.....	1,412	2,657	2 17.5	444 00
2	Roller Boys.....	240	386	1 05.0	203 00
2	Roller Carrier.....	188	438	1 75.5	385 00
1	Shipper Help.....	57	256	1 37.0	351 00
9	Shipping Clerk.....	715	2,102	1 87.0	436 00
9	Sorter.....	1,050	1,767	1 42.5	280 00
50	Teamster.....	5,537	10,113	1 83.0	370 00
3	Warehouse Men.....	81	858	2 00.5	573 00
4	Writers.....	449	803	2 13.5	429 00
1	Wrapper boss.....	67	246	1 25.5	309 00
5	Engineer.....	313	1,512	1 96.5	594 00
4	Fillers in.....	369	1,091	1 78.0	486 00
2	Foremen.....	183	547	2 36.0	645 00
1	Master Teaser.....	46	319	2 18.0	696 00
3	Teaser.....	492	603	1 62.5	327 00
6	Leersman.....	744	1,446	1 16.5	281 00
1	Watchman.....	140	225	1 66.0	374 00

**TABLE SHOWING OCCUPATION,  
LOST TIME, WORKING TIME AND ANNUAL EARNINGS IN  
VARIOUS OCCUPATIONS.**

GLASS—Concluded.

No.	OCCUPATION	Lost Time, days	Work Time, days	Wages per day	Average annual earnings
12	Master teaser .....	1,213	3,167	3 02.0	797 00
1	Mixer helper .....	119	246	2 01.0	495 00
34	Watchmen .....	5,933	6,477	1 48.5	283 00
23	Packer .....	2,754	4,445	1 74.0	336 27
15	Pot maker .....	415	4,280	2 90.0	931 86
23	Pot maker helper .....	1,678	5,521	1 98.0	475 28
3	Roller carrier .....	268	671	1 13.0	379 11
1	Sand burner .....	87	226	2 01.5	454 00
7	Shipping clerk .....	219	1,972	1 88.0	529 62
51	Laborer .....	6,310	9,653	98.0	185 49
85	Teamster .....	6,000	20,605	1 87.0	453 31
2	Ware hand .....	144	482	1 92.5	463 92
3	Warehouse men .....	81	858	1 83.0	524 52
16	Watchmen .....	124	4,884	1 31.0	399 88
4	Writers .....	749	803	2 13.0	427 59
1	Wrapper .....	67	246	1 25.5	308 73

## AVERAGE RETAIL PRICES OF COMMODITIES.

YEARS 1860, 1872, 1878.

ARTICLES	Quantities	1860	1872	1878
Flour, wheat, extra.....	Per bbl.	\$ 6 64	\$ 10 95	\$ 8 63
Flour, wheat, family.....	"	7 42	12 87	7 96
Flour, rye.....	Per lb.	3½	4½	3½
Cornmeal.....	"	2½	2½	2
Codfish, dry.....	"	5½	8½	6
Rice.....	"	6½	11½	9½
Beans, white.....	Per qt.	8½	10½	8½
Tea, Oolong.....	Per lb.	54½	69	60½
Coffee, Rio, green.....	"	21½	34½	23½
Coffee, roasted.....	"	23	42½	26½
Sugar, brown.....	"	8½	10½	8½
Sugar, coffee.....	"	9	10½	9½
Sugar, granulated.....	"	10½	12	10
Molasses, N. O.....	Per gal.	50½	70	57½
Molasses, Porto Rico.....	"	57½	76½	68
Syrup.....	"	63½	75	86½
Soap, common.....	Per lb.	8½	8½	8
Starch.....	"	11½	12½	9½
Beef, fresh.....	"	12½	19½	14½
Beef, soup.....	"	5½	7½	5½
Beef, rump steak.....	"	16	29½	20½
Beef, corned.....	"	7½	10½	8
Veal, fore quarter.....	"	6½	10½	10½
Veal, hind quarter.....	"	10½	17½	15½
Veal, cutlets.....	"	14	28½	20
Mutton, fore quarter.....	"	6½	10	10½
Mutton, leg.....	"	11½	17½	17½
Mutton, chops.....	"	13½	15½	18½
Pork, fresh.....	"	9½	11½	10
Pork, salted.....	"	10½	11	9½
Hams, smoked.....	"	11½	13½	12½
Sausages.....	"	11½	12½	11½
Lard.....	"	12½	12½	10½

## AVERAGE RETAIL PRICES OF COMMODITIES.

YEARS 1860, 1872, 1878.

ARTICLES	Quantities	1860	1872	1878
Butter .....	Per lb.	\$ 19½	\$ 39½	\$ 25½
Cheese .....	"	11½	17½	12½
Potatoes .....	Per bu.	74½	97½	97½
Milk .....	Per qt.	5½	8½	5½
Eggs .....	Per doz.	22½	33½	25
Coal, soft .....	Per ton	6 40	9 25	6 45
Wood, hard .....	Per cord	7 24	10 12	6 74
Wood, pine .....	"	4 96	7 16	5 04
Shirting, 4-4 brown .....	Per yd.	9½	12½	7½
Shirting, 4-4 bleached .....	"	11½	16	9½
Sheeting, 9-8 brown .....	"	11½	14½	9
Sheeting, 9-8 bleached .....	"	14½	15½	11½
Canton flannel .....	"	15½	27½	14½
Ticking .....	"	17½	26	17½
Prints .....	"	9½	11	7½



## AVERAGE RETAIL PRICES OF COMMODITIES.

YEARS 1880, 1884, 1891.

ARTICLES	Quantities	1880	1884	1891
Flour, wheat, extra.....	Per lb.	\$ 5½	\$ 3½	\$ 3½
Flour, wheat, family.....	"	4½	3½	3½
Cornmeal.....	"	3½	2½	1½
Oatmeal.....	"	4½	4½	4½
Rice.....	"	8	8½	7½
Coffee, Java, roasted.....	"	30	25	32
Sugar, granulated.....	"	10½	9½	5½
Molasses, N. O.....	Per gal.	62½	57	52½
Molasses, Porto Rico.....	"	49½	48½	47½
Syrup, sugarhouse.....	"	52½	60½	43½
Soap, common.....	Per lb.	5½	6½	4½
Beans, white.....	Per qt.	10½	7½	9½
Lard.....	Per lb.	12½	12½	10
Butter, state dairy.....	"	37½	26	21
Cheese, state factory.....	"	21½	14½	15½
Codfish, dry.....	"	10½	9½	10
Hams, smoked.....	"	15½	15½	12½
Flour, rye.....	"	3	3	3½
Coffee, Rio, green.....	"	21½	19½	19
Coffee, Java, green.....	"	25½	23½	25½
Coffee, roasted.....	"	40½	27	28½
Sugar, brown.....	"	8½	7	4½
Sugar, coffee "C".....	"	8½	8½	6
Milk.....	Per qt.	6½	7	7½
Eggs.....	Per doz.	31½	19½	23
Potatoes.....	Per bu.	82½	72½	85
Tea, Oolong.....	Per lb.	62½	57½	47½
Starch.....	"	8	9	6½
Oil, kerosene.....	Per gal.	18½	18½	11
Tea, black.....	Per lb.	-----	53	-----
Tea, green.....	"	-----	59	-----
Tea, Japan.....	"	-----	52½	-----
B. Bacon.....	"	-----	14	8

## AVERAGE RETAIL PRICES OF COMMODITIES.

YEARS 1880, 1884, 1891.

ARTICLES	Quantities	1880	1884	1891
Mutton chops.....	Per lb.	.....	\$ 11	\$ 18
Sausages.....	"	.....	7½	15
Beef, roast.....	"	\$ 12¾	11½	12¾
Beef, chuck steak.....	"	.....	13½	12
Pork, fresh.....	"	.....	13½	16
Pork, salted.....	"	.....	11½	15½
Beef, sirloin.....	"	.....	19	18½
Beefsteak, round.....	"	.....	15	14½
Beef, porterhouse.....	"	.....	23	22¾
Beef, corned.....	"	.....	12½	11
Lamb chops.....	"	.....	.....	28½
Veal, forequarter.....	"	.....	10	12½
Veal, hindquarter.....	"	.....	15	16
Canton flannel.....	Per yd.	14½	14½	12½
Red flannel, twilled.....	"	57½	47	44½
Coal, soft.....	Ton.	6 00	4 71	.....
Coal, hard.....	"	.....	7 37	.....
Wood, stove size.....	Cord.	5 87	4 87	.....
Calico, print.....	Per yd.	7½	7	6½
Sheeting, unbleached.....	"	.....	8	.....
Sheeting, bleached, 4-4.....	"	10½	10	9
Shirting, bleached.....	"	10	10½	10
Shirting, unbleached.....	"	.....	9	.....
Sheeting, brown, 4-4.....	"	9½	8½	8½
Sheeting, brown, 9-8.....	"	11½	7½	10½
Domestic gingham.....	"	10¾	9¾	8¾
Domestic shirting, plaids.....	"	17	16½	15
Domestic shirting, checks.....	"	16	14	13
Ticking.....	"	17½	15½	13
Denims, brown and blue.....	"	19	15½	14½
Ingrain carpets, 2-ply, all wool.....	"	1 15	85	85
Ingrain carpets, 3-ply, all wool.....	"	1 65	1 20	1 25
Tapestry brussels, 9-wire.....	"	1 10	80	1 00

## AVERAGE RETAIL PRICES OF COMMODITIES.

YEARS 1880, 1884, 1891.

Tapestry brussels, 10-wire .....	"	1 25	1 00	1 25
Body brussels, 5-frame .....	"	1 55	1 25	1 75
Blankets, 10-4 .....	"	-----	-----	4 00
Calico .....	Per yd.	-----	-----	10

## PRICES PAID BY THE OFFICE OF THE COMMISSARY GENERAL

OF SUBSISTENCE, 1896 TO 1891.

Baltimore, Boston and New York	Year	Fork, per lb.	Bacon, per lb.	Flour, per lb.	Corn Meal	Beans, per bu.	Rice	Coffee, Rio, Green	Coffee, Rio, Roasted	Tea, Black	Tea, Green	Sugar, Brown	Vinegar	Soap	Pepper
1896	-----	\$ 9.3	\$ 12.5	\$ 8.33	\$ 2.0	\$2 85.0	\$ 9.0	\$ 10.9	\$ 16.0	\$ 59.0	\$ 1 25	\$ 10.0	\$ 12.0	\$ 6.7	\$ 30.0
1895	-----	7.7	14.0	7.31	3.0	5.0	8.0	32.0	38.0	82.0	1 25	12.0	16.0	7.0	32.0
1890	-----	13.9	20.6	7.52	2.4	3.2	8.5	19.9	25.0	1 00.0	1.05	12.5	27.7	6.3	31.0
1877	-----	8.1	10.5	8.21	1.9	4.3	7.2	21.8	27.3	77.0	83	10.0	21.7	6.2	27.0
1884	-----	8.9	10.25	5.84	2.2	3.8	6.4	11.7	15.4	58.0	64	5.9	15.0	5.8	24.0
1891	-----	7.5	8.10	5.33	2.5	4.0	6.6	20.8	27.5	67.0	63	4.8	15.8	4.3	18.2
Average	-----	9.2	12.8	7.09	2.3	4.0	7.1	19.5	24.9	74.0	94	9.1	18.1	6.0	27.0

## PRICES PAID BY NAVY DEPARTMENT, 1856 TO 1891.

Baltimore, Boston and New York	Year	Pork, per lb.	Flour, per. bbl.	Rice	Coffee, Rio, green	Tea, black	Sugar, brown	Vinegar	Soap	Beef, fresh	Butter	Molasses	Blankets	Trousers	Shirts, Hannel	Drawers, Canton Hannel	Stockings
		\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$	\$
1856.....		9.7	10 86	5.5	12.0	44	7.4	11.9	6.5	10.8	27.0	33	1 85	2 32	98	43	29
1863.....		-----	6 50	6.0	25.0	59	8.7	9.6	6.5	7.0	22.0	34	2 37	2 50	1 53	95	32
1870.....		-----	-----	-----	-----	-----	-----	16.0	6.2	9.0	28.0	41	3 15	2 10	1 60	67	21
1877.....		-----	-----	-----	-----	-----	-----	13.0	6.3	11.0	26.0	38	4 25	3 09	1 28	61	29
1884.....		6.7	-----	6.2	12.25	-----	8.0	14.0	5.9	12.8	27.5	54	2 11	2 71	1 25	55	24
1891.....		7.0	5 40	6.7	19.0	27	5.4	13.5	4.5	7.6	23.0	37	2 44	3 29	1 25	55	33

## TABLE OF INCOME AND EXPENSES OF WAGE EARNERS.

COMPILED FROM REPORT OF LABOR COMMISSIONER OF MONTANA FOR 1893.

No. of Employees	OCCUPATION	Lost Time, Days	Days Employed	Wages per Diem	Earnings	No. Re- ported as Boarding	Cost of Boarding per An'm
44	Railroad clerks.....	7	358	\$2 86	\$1,024 00	20	\$353 00
41	" conductors .....	19	346	4 02	1,391 00	12	432 00
97	" engineers .....	22	343	4 03	1,379 00	23	401 00
57	" firemen .....	19	346	2 38	823 00	33	361 00
22	" brakemen .....	23	352	2 49	876 00	15	415 00
11	" switchmen .....	33	332	3 18	1,056 00	10	357 00
30	" laborers .....	17	348	1 81	630 00	30	282 00
85	Compositors .....	37	272	4 02	1,093 00	37	432 00
58	Telegraphers .....	16	293	2 56	750 00	33	419 00
7	Telephone operators .....	0	265	1 21	442 00	7	.....
110	Bookkeepers .....	7	302	4 17	1,259 00	40	486 00
248	Clerks and salesmen (male) .....	7	302	3 61	1 090 00		
17	Clerks and salesmen (female) .....	0	309	2 00	618 00		
14	Bank clerks .....	0	309	4 30	1,329 00	153	432 00
28	Drug clerks .....	10	299	3 06	915 00		
14	Stenographers (male) .....	13	296	3 20	947 00		
13	Stenographers (female) .....	5	304	2 65	806 00		



## RAILROAD EMPLOYEES, STATE OF MICHIGAN.

No.	OCCUPATION	Lost Time, in Months	Working Time, in Months	Wages	Total Amount	Amount Saved	REMARKS
237	Agents .....	-----	12.0	\$58 72	\$704 64	\$87 71	
1	Commercial agent .....	-----	12.0	300 00	3,600 00	1,800 00	
1	Cartage agent .....	-----	12.0	150 00	1,800 00	-----	
1	Car agent .....	-----	11.0	125 00	1,500 00	-----	
1	Auditor .....	-----	12.0	225 00	2,700 00	300 00	
3	Accountants .....	-----	12.0	116 66	1,399 92	26 66	
3	Bookkeepers .....	-----	12.0	55 00	660 00	250 00	
1	Secretary .....	-----	12.0	90 00	1,080 00	-----	
6	Stenographers .....	1.0	11.0	59 13	650 43	175 00	
37	Chief clerks .....	1.0	11.0	57 70	634 75	70 94	
26	Cashiers .....	2.0	10.0	73 71	737 15	49 42	
240	Clerks .....	1.0	11.0	55 01	605 14	49 40	
86	Bill clerks .....	1.0	11.0	59 82	658 02	53 44	
27	Check clerks .....	1.0	11.0	45 38	499 18	36 00	
3	Storekeepers .....	2.0	10.0	53 80	538 00	83 30	
3	Depot police .....	-----	12.0	45 00	540 00	-----	

...Overtime, 20 cents per hour



	2.0	10.0	39 55	395 47	7 90
19 Porter .....	2.0	10.0	39 55	395 47	7 90
6 Call boys.....	1.0	11.0	37 00	449 16	10 00
4 Messengers .....	5.0	7.0	33 18	232 25	30 00
4 Collector .....	-----	12.0	41 25	495 00	-----
4 Lineman .....	-----	12.0	66 25	795 00	112 50
24 Train dispatcher.....	1.0	11.0	93 52	1,028 75	141 69
153 Operator .....	1.0	11.0	47 20	519 29	51 02
3 Freight solicitor .....	-----	12.0	88 33½	1,060 00	133 30
3 Depot master .....	-----	12.0	75 00	900 00	33 00
1 Car recorder .....	-----	12.0	45 00	540 00	300 00
39 Baggage man .....	0.6	11.4	37 00	431 80	6 21
120 Car repair .....	0.8	11.2	43 20	483 84	27 00
82 Wipers .....	1.5	10.95	37 66	412 38	16 07
282 Laborers .....	1.5	10.5	36 60	384 30	15 51
458 Section men .....	1.4	10.6	29 00	397 40	11 50
121 *Foreman .....	-----	12.0	45 25	543 10	42 77
24 Tinner .....	1.0	11.0	52 57	578 30	44 58
86 Blacksmiths .....	1.0	11.0	55 58	611 38	22 38
9 Blacksmiths' helpers .....	-----	12.0	43 72	524 66	52 50
36 Boilermaker .....	1.0	11.0	63 17	694 92	61 40
243 Machinist .....	4.0	8.0	74 90	599 27	51 72

**\*Section foreman.**

## RAILROAD EMPLOYEES, STATE OF MICHIGAN—Continued.

No.	OCCUPATION	Lost Time, in Months	Working Time, in Months	Wages	Total Amount	Amount Saved	REMARKS
1	Machinist's helper.....	-----	12.0	\$ 30.00	\$ 300.00	-----	
1	Machinist's apprentice.....	9.0	3.0	14.35	43.00	-----	
1	Pipe maker.....	6.0	6.0	32.50	195.00	-----	
1	Steam fitter.....	-----	12.0	58.67	704.00	-----	
1	Coppersmith.....	-----	12.0	65.25	783.00	-----	
1	Brass finisher.....	-----	12.0	65.25	783.00	-----	
1	Pattern maker.....	-----	12.0	71.75	861.00	-----	
1	Stationary fireman.....	-----	12.0	39.68	469.00	-----	
12	Painters.....	1.0	11.0	6.365	700.17	-----	
235	Carpenters.....	1.0	11.0	47.68	524.28	\$ 30.48	
319	Engineers.....	1.0	11.0	100.03	1,100.32	161.27	Overtime 32 cents per hour
324	Conductors.....	1.0	11.0	82.50	997.57	116.00	Overtime 27 cents per hour
453	Brakemen.....	-----	12.0	45.96	551.60	43.50	
310	Firemen.....	1.0	11.0	50.40	620.40	56.60	
41	Yardmasters.....	1.0	11.0	75.90	825.99	81.70	
233	Switchmen.....	2.0	10.0	68.21	682.10	40.75	

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5	Roadmaster	12.0	\$ 91 00	\$ 1,092 00	\$ 100 00
26	Trackman	2.0	40 22	402 15	19 00
2	General foremen	12.0	62 50	750 00	330 00
1	Night foreman	12.0	70 00	840 00	-----
2	W. H. foremen	12.0	87 50	1,050 00	375 00
12	Foremen	12.0	78 71	944 50	25 00
11	Foreman	12.0	58 67	704 00	-----
5	Bridge foremen	12.0	70 17	842 00	150 00
1	Carbuilder	12.0	49 00	508 00	-----
1	Master mechanic	12.0	125 00	1,500 00	-----
2	Division superintendents	12.0	187 50	450 00	-----
1	Trainmaster	12.0	100 00	1,200 00	-----
7	Civil engineers	3.0	87 00	783 00	-----
4	Draughtsmen	12.0	77 41	909 00	-----
1	Architect	12.0	115 00	1,380 00	-----
44	Watchmen	2.0	40 03	400 30	5 11
1	Yardman	12.0	52 17	626 00	-----
48	Flagmen	3.0	28 61	257 50	2 70
1	Target man	12.0	35 00	420 00	-----
10	Gate keepers	12.0	30 00	360 00	-----
2	Car scalers	12.0	31 80	381 50	-----

• Track forman. † Car shop. ‡ Repair.

## RAILROAD EMPLOYÉS, STATE OF MICHIGAN—Concluded.

No.	OCCUPATION	Lost Time, in Months	Working Time, in Months	Wages	Total Amount	Amount Saved	REMARKS
25	Car cleaner .....	1.1	10.9	\$32 69	\$356 33	\$30 00	
5	Car inspector .....	-----	12.0	45 00	540 00	50 00	
4	Hoistler .....	-----	12.0	37 50	450 00	-----	
3	Pumper .....	2.0	10.0	32 00	320 00	-----	
2	Roundhouse men .....	2.0	10.0	72 00	720 00	-----	
9	Lumber yard men .....	-----	12.0	35 60	427 23	-----	
4	Coal yard men .....	3.0	9.0	42 75	384 75	62 50	
219	Truckers .....	1.0	11.0	36 70	403 70	33 00	
3	Lampighter .....	-----	12.0	38 84	466 00	8 30	
4	Bridge tender .....	2.0	10.0	47 00	470 00	25 00	
1	Ticket inspector .....	-----	12.0	50 00	600 00	-----	

## Farm Prices in Two Centuries.

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From report of the statistician of U. S. Department of Agriculture, September, 1892.

Casual extracts from desultory memoranda are of some interest and value, while far less important than continuous records upon one uniform basis. Deductions cannot be safely drawn from disconnected data, necessarily without natural sequence, and for that reason of little use for purposes of comparison. Continuous records are therefore valuable, their utility depending on the length of the period which they cover. Few farmers make systematic registry of prices or results, even for short periods, so that a careful and persistent record for a long series of years is very rare and exceedingly interesting and important as material for history. We have been fortunate in obtaining such a record, which runs through the farm experience of two generations, in the very heart of the original settlements of the Atlantic slope in Connecticut and in Pennsylvania. It is comprised in three original books, including 348 pages of accounts of products sold, of wages of labor and charges for board.

This transcript is furnished by Mr. H. P. Plumb, of Peely, Hanover township, Luzerne county, who owns and occupies the farm on which his grandfather, Elisha Blackman, resided from 1791 till his death in 1845, near Wilkesbarre, Pa., on the north branch of the Susquehanna. The records were made by Mr. Blackman from 1805 to 1842, inclusive, and from 1770 to 1804 by his father, also named

Elisha, first in Lebanon (New London county), Conn., and from 1772 to 1778 on his farm near Wilkesbarre, in the "Connecticut Susquehanna Purchase," to which the Blackmans had immigrated. On the 3rd of July, 1778, occurred that most cruel Indian butchery, the massacre of Wyoming, in which young Blackman, then eighteen years of age, fought and slew an Indian antagonist, and succeeded in escaping from the valley, with father and mother, two younger brothers and two sisters.

The father returned to Connecticut, and the entries here produced were afterwards made in that state till 1787, when his occupancy of the farm near

Wilkesbarre was again resumed, where he continued to reside until his death in 1804. The later data are recorded by the son during the thirty-eight following years. A period of seventy-three consecutive years is thus covered.

The younger Elisha did not return to Connecticut, but retreated to Stroudsburg, on the Delaware river, only to return in August, and in October following, as soon as it was practicable to reconnoiter six miles from the fort at Wilkesbarre, helped to bury the dead of the Wyoming battlefield, participated in skirmishing and fighting and in gathering such crops as had not been wholly destroyed by the Indians, and afterwards entered the military service, first as a volunteer and subsequently as an enlisted soldier, serving in Col. Sherman's regiment on the Hudson. In 1786 he returned with his brothers to the Wyoming valley and built a log cabin on the abandoned farm, where he was rejoined by his father the following year. In 1788 he married Anne Hurlbut, and in 1791 moved to Hanover township and built a log cabin and established a new farm, on which he lived to the time of his death. Mr. Plumb is the son of the daughter of the younger Blackman. So much of history and biography is necessary to show the localities and conditions and the personnel of these records.

The accounts were kept in Connecticut currency, six shillings to the dollar, until the end of the revolutionary period, and from 1787 in Pennsylvania currency, seven shillings six pence to the dollar. In the earlier period there was no dollar, no United States money, though there were Mexican or Spanish dollars. The values are all given in pounds, shillings and pence until after 1814, when dollars and cents are used. For the convenience of the reader, the local currency is in every item rendered into national currency on the basis of six shillings to the dollar for Connecticut money and seven shillings six pence for Pennsylvania currency. Very little money was in circulation during the earlier period; domestic commerce was largely barter, values being based on the currency standards in use and expressed in the denominations of the currency in vogue.

To prevent unnecessary duplication, only one item of a kind in any one year has been transcribed, unless there was something in season or circumstances or quality of product to render it necessary. In the wages of labor, so constantly differentiated by degrees of skill and intrinsic value of service, it was necessary to show the kind or quality.

An analysis of these statements of prices shows that the retail valuation of maize in the colonial period was less variable than at present, and averaged about 50 cents per bushel, or two-thirds the prevailing rates of recent years. During the period of the war with England, near the beginning of this century, prices were advanced to about 75 cents per bushel. Between 1820 and 1830 the value had fallen to 50 cents. In 1836 it was high again.

On the contrary, wheat shows a very wide range of fluctuation. The lowest values are 60 to 67 cents per bushel in the decade before the organization of the National government. In the years following, the price went to \$1.17. Later it is charged at 87 cents to \$1 per bushel. It went up to \$1.50 in 1814,

and in 1817 was sold at \$2, in the season following the almost universal crop failures of 1816, noted for its frosts in every summer month.

Other grain was cheap. Buckwheat was sold at from 26 to 40 cents per bushel; oats at 24 or 25 cents ordinarily, in exceptional years going to 40 cents. Rye was nearly as valuable as wheat, except in years of marked scarcity of the better grain.

Potatoes were as variable in price as at present, with a lower average. In good years the retail value was usually as low as 33 cents and the next year might be 50, according to abundance. In the beginning of the century the usual rates were about the same as in the colonial period.

Peas and beans rarely brought more than \$1.25 to \$1.50, half to two-thirds the usual retail prices of the present time and frequently sold at \$1 per bushel.

Beef was low, from 3 to 5 cents ordinarily, or from 5 to 7 for the more valuable pieces with some variation at different dates for the same qualities. Mutton is charged at 5 1-2 cents. Pork appears to have been higher than beef, fresh pork being charged at 5 to 7 cents, while salt pork as occasionally sold in small quantities from the surplus of the farm supply, is comparatively uniform at 10 to 13 1-3 cents, equivalent to a Pennsylvania shilling. In one instance a pig of sixty pounds is charged at the rate of 4 1-6 cents; in another, one of sixty-three pounds, at 3 1-3 cents; presumably these were live weights. A "gammon of ham" is noted in 1794 at 6 2-3 cents. The price of lard varied from 8 to 13 cents at different dates. Veal is rated at from about 4 to 6 1-2 cents.

Shad were cheap, usually 4 pence; in one case a charge of \$1.44 is made for 100 shad; in another, the cost of 131 was \$5.82, the same rate.

Game was abundant in those days and therefore cheap. Repeated sales of venison are noted, at the uniform rate of 3 1-3 cents or 3 pence per pound.



Bear meat was slightly higher, usually charged at 4 pence. Pigeons were in extraordinary abundance, especially about the close of the eighteenth century, judging from frequency of mention, as well as from the price named, which was uniform at a shilling per dozen, 13 1-3 cents, a little more than a cent apiece. In the early part of the present century the maximum was 25 cents. Elderly readers will remember the flights of flocks of pigeons which darkened the skies during the first third of the present century, of which any recent experience fails to give any adequate conception.

There are several items relating to tanned skins, necessarily coincident with a plethoric supply of game. The value of deer skins is placed at \$1.17 each and the charge is \$1 to \$2 for a bear skin. A dog skin is rated at 40 cents; a sheep skin, 60 cents.

Milk was charged at about 2 cents per quart for small quantities; there was evidently a very limited and casual neighborhood demand, such as in recent days commands 4 cents in the country and 6, 8 or 10 in the cities for milk delivered, which farmers are furnishing at 3 cents, and even lower, on contract, to middlemen. The price of cheese is stated at 7 to 8 cents, in the war period going up to 12, and of butter at 1 shilling, or 13 1-3 cents, and from that price to 17 cents in certain seasons, though in 1816, the year of great agricultural scarcity, the price ran up to 25 cents.

Apples were ordinarily sold, in abundant seasons, for 12 1-2 cents per bushel, at 25 cents in less productive years and 37 in seasons of greater scarcity, at 50 cents in 1823, and once, in 1836, the charge is \$1, and in 1841, 74 cents. Cider was sold by the gallon at 15 to 20 cents and by the barrel from \$1 to \$3, according to the supply.

The value of hay is sometimes made as low as \$5 per ton, ranging, according to the supply, from \$4 to \$8.

Wages are registered by single day's work, as a rule. In some cases monthly wages are indicated. In comparison with present rates, which are near, to \$1 for transient labor, and \$1.75 or \$2 in harvest, the rates for varied service were only about a third as much. Ordinary unskilled labor was remunerated at the rate of 33 cents per day, that requiring a degree of skill 42 cents, and harvest work 50 cents—in a few cases a little more. The differentiation in 1771 was: work on highway, 33 cents; breaking flax, 33; mowing, 50. Such differences were quite uniform till the close of the eighteenth century. Then mowing or reaping was frequently charged at 67 cents, and in 1811 there is a charge at that rate for mowing, and at the same time one of \$1 for cradling. Wages in the period of the war with Great Britain were higher than at earlier or later dates. Threshing, breaking flax, killing hogs, mending fence, cutting wood, usually demanded only a medium rate of wages, while mowing, reaping, cradling, or stonework, called for higher pay.

Wages by the month are named in several cases, generally those in which one of the sons is hired to a neighbor. In 1779 a charge of \$30 is made for the wages of Ichabod, a youth of 17, for six months; and in 1781 the services of Eleazer, a son 16 years old, for a like period, were valued at \$25. From \$4 to \$5 per month represent the usual compensation of well-grown lads not arrived at man's estate. In 1780 the remuneration for such "chores" as "cutting wood at the door one year and foddering" was the moderate sum of \$5.

In connection with wages, the remuneration of labor as piecework, in spinning, weaving, shoemaking, and other forms of manufacture, naturally comes in. The charge of making shoes was evidently by the kind or quality. More frequently the sum recorded was 60 cents for making a pair. Woman's shoes were sometimes 50 cents, sometimes 60. Making boots varied from \$1.60 to \$1.87, and once in 1817

it was charged \$3. Soling boots, 40 cents; soling moccasins, 13 cents. Making a pair of moccasins cost 27 cents, or 2 shillings. Finding uppers, in addition to making shoes, was charged at \$1.20; and finding soles, with the making of woman's shoes, \$1.10. In 1809 occurs an item of \$1.50 for a pair of woman's shoes, and another of \$5.50 for a pair of boots.

Footing a pair of socks in 1776 was charged 50 cents, and again in 1825 it was only 25 cents; in 1803 sale of three pairs was made at \$2.

Shirts were not in those days stitched with sewing machines; in 1776 the charge for making a pair of shirts was 67 cents, and later a shirt ready made cost \$1.67. In 1796 the weaving of 9 yards of cloth cost 8 pence per yard, or 80 cents, and of 28 yards, at 10 pence, \$3.11; but in 1799, for weaving 8 yards of cloth, doubtless of different texture, the charge was only 53 cents. In 1810, weaving of 14 yards of cloth was booked at \$1.61. Spinning three run and five knots is put at 45 cents. Sales of cloth are reported in 1800: 5 1-4 yards at \$2.33, about 44 cents per yard; 3 1-2 at \$1.87, or 53 cents. In 1776 seven yards of checked linen were sold at 50 cents per yard, and 5 yards of tow cloth at the same price.

Several charges of tailoring are made, generally by the local tailor, Askam. When the day's works are specified the rate is equivalent to about 80 cents per day.

The use of a pair of oxen per day was usually 25 cents. In one instance, plowing two acres was booked at 50 cents, and in another two men and two horses to plow an acre were furnished for \$1. Plowing, harrowing, and sowing two acres of flax, in 1775, cost \$3.

Board was cheap in those early days at \$1 per week. Children were boarded at a somewhat lower charge. Susannah was boarded thirteen weeks for \$6.50. There is a charge of one meal of victuals at 11 cents.

Pasturing of cows or other cattle is generally recorded at 25 cents per week. In 1820 a charge of 15 cents is made for pasturing a cow one week. Items of pasturing horses are given at the rate of 25 cents per week. In 1784 a charge of \$3.33 is made for "keeping one of your cattle, winter of 1783."

A few items only indicate the value of farm animals. In 1771 an ox was booked at \$17.50. In 1772 a calf is valued at \$2. A cow and calf in 1824 brought \$15. Later, in 1860, a pair of oxen sold for \$60. The use of a cow one year, in 1794, was rated at \$3. A sheep in 1780, in Connecticut, was valued at \$1.50.

An examination of these prices suggests the great advance in the rate of wages of labor and the still greater reduction in the cost of manufactures of all kinds. It was the day of fabrication by "main strength and awkwardness," by crude manual labor unaided by machinery except of the roughest and simplest style. It was the day of individual and isolated effort, antedating the era of aggregation in factories, classification and division of labor, and invention of labor-saving processes and appliances.

The price of farm products was usually low, but fluctuating greatly according to local scarcity, which could not be mitigated by distribution from regions of plenty. If there were big crops they could not be sold; if relative failures, there was almost nothing to sell. Every locality, in its industries and products, existed for and by itself, having no relations with other communities; therefore, the individual farm surplus was small, the inducement to produce wanting, and the ability to purchase other than farm supplies extremely limited. The industrious family had abundance of everything it could grow, such clothing as the loom of the household could produce, and such furniture as could be made on the place or in the neighborhood, and little else. And yet the man of industry and enterprise always laid aside some savings of the year, and grew relatively rich

with what in the present day, with new wants and enlarged aspirations, would not suffice to make a moderate competency. A careful study of this statement of prices will shed a flood of light on the farm economy of the last century and illustrate the wonderful progress that has followed in the style of living of the farmer, and in the facility of production and distribution of his crops.

Extract from account of Elisha Blackman, in Lebanon, New London county, Conn., and in Wilkesbarre, Luzerne county, Pa., from 1770 to 1804, inclusive.



## FARM PRICES IN TWO CENTURIES.

Connecticut currency, 6 shillings to the dollar.

Year.	ITEM CHARGED.	Early State currency.	United States currency.
1770	11 $\frac{3}{4}$ pounds cheese.....	£ s. d. 4 11	Dollars. 0 82
	Two days' use of yoke of oxen .....	3 0	50
	$\frac{1}{4}$ quintal of fish.....	4 6	75
	One grindstone .....	1 2 0	3 67
	Two bushels of peas .....	14 0	2 33
	One dozen cakes castile soap.....	7 3	1 21
	Five hundred pounds hay.....	5 0	83
	One dozen candles.....	1 0	17
	Pasturing mare six weeks .....	9 0	1 50
	Yoke of oxen, two days.....	3 0	50
	One day's work, self .....	2 6	42
	One pound tobacco.....	0 8	11
	One gallon rum .....	4 0	67
	Going to Halifax, four days .....	12 0	2 00
1771	One and one-half day's work digging cellar .....	4 6	75
	Eighteen quarts milk .....	3 0	50
	Thirty pounds fish.....	6 0	1 00
	One day's work on highway.....	2 0	33
	One day's work at wall .....	3 0	50
	Six pounds fish .....	1 6	25
	Six geese, one gosling .....	13 0	2 17
	Eight and one-half bushels oats .....	7 1	1 18
	One day, mowing.....	3 0	50
	Seventy weight of beef.....	11 8	1 94
	Two bushels peas.....	14 0	2 33
	An ox .....	5 5 0	17 50
	Seven quarts milk.....	1 0	17
	One-half a cowhide.....	6 0	1 00
	Three days chopping wood.....	7 6	1 25
	Three bushels ashes.....	2 6	42

## FARM PRICES IN TWO CENTURIES—Continued.

Connecticut currency, 6 shillings to the dollar.

Year	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1771	A mare to ride to Mansfield .....	3 0	50
	One-half bushel flaxseed .....	3 0	50
	One grindstone .....	10 0	1 67
	One day breaking flax .....	2 0	33
1772	One calf .....	12 0	2 00
	Two days digging stone .....	6 0	1 00
	Nine and one-half days' work of oxen .....	14 6	2 42
	Two men and two horses to plow an acre .....	6 0	1 00
	One day's work .....	3 0	50
	Plowing two acres .....	3 0	50
	Three days carrying a chain .....	9 0	1 50
	Three loads hay .....	1 10 0	5 00
	Two and one-half yards tow cloth .....	5 0	83
	One ox yoke .....	7 0	1 17
	One-half day picking corn .....	1 0	17
	One-half bushel flaxseed .....	2 6	42
1773	One bushel corn .....	3 6	58
	Boarding two weeks .....	12 0	2 00
	One-half bushel seed corn .....	2 0	33
	Seven days, self and man, moving .....	1 8 0	4 67
	One bushel oats .....	1 6	25
	Two bushels corn .....	6 0	1 00
	Ferry over and back .....	1 0	17
	Ferry to fetch bushel of corn .....	0 8	11
	2 loads of wood .....	14 0	2 33
	½ bushel of flaxseed .....	2 6	42
	1½ yards tow cloth .....	5 0	83
	1 pig (weighed 22 pounds) .....	8 6	1 42
	½ bushel seed corn .....	2 0	33
	2 loads of wood .....	14 0	2 33

## FARM PRICES IN TWO CENTURIES—Continued.

Connecticut currency, 6 shillings to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1773	2 loads of wood.....	1 0 0	3 33
1774	¼ of a town lot (Wilkesbarre).....	2 14 0	9 00
	12 pounds tobacco.....	6 0	1 00
	½ pound hatoheled flax.....	1 0	17
	20 pumpkins.....	1 3	21
	1 bushel corn.....	3 0	50
	8½ pounds mutton.....	2 9	46
	½ bushel wheat.....	3 0	50
	1 day killing hogs.....	2 6	42
	1 bushel flaxseed.....	8 0	1 33
	1 hog, weight 182 pounds.....	2 13 1	8 85
	1 bushel oats.....	2 0	33
	16 pounds pork.....	11 0	1 83
	4 pounds flax.....	3 0	50
	1 day's work.....	2 6	42
	1 bridle.....	3 0	50
	45 feet of boards.....	1 6	25
	1 day hoeing corn.....	2 6	42
	½ day plowing between corn.....	2 6	42
	1 day, the boys (14, 12 and 10).....	2 6	42
	1 day reaping.....	3 0	50
	3 boys a day stripping tobacco.....	3 0	50
	2 weeks' boarding.....	12 0	2 00
1775	1 day, yoke of oxen.....	1 6	25
	2 pounds pork.....	1 0	17
	3½ pounds flax.....	2 4	39
	25 bundles of oats.....	6 0	1 00
	6 quarts salt.....	3 0	50
	2 days' reaping.....	7 0	1 17
	Plowing 2 acres land.....	12 0	2 00



## FARM PRICES IN TWO CENTURIES—Continued.

Connecticut currency, 6 shillings to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
1775	39 quarts milk.....	£ s. d. 6 6	Dollars. 1 08
	10 bushels corn.....	1 10 0	5 00
	½ bushel potatoes.....	1 0	17
	1½ pounds butter.....	1 0	17
	2 pounds tobacco.....	1 0	17
	1 bushel oats.....	1 6	25
	1 day, self and oxen.....	4 0	67
	1 day, my mare.....	1 0	17
	1 day, yoke of oxen.....	1 6	25
	1 peck of beans.....	1 0	17
1776	1 meal of victuals.....	0 8	11
	Plowing, harrowing and sowing 2 acres flax land....	18 0	3 00
	3½ pounds tobacco.....	1 9	29
	½ bushel beans.....	2 0	33
	Quarter of beef, 83 pounds, at 3d.....	1 0 9	3 46
	1 week's board.....	5 0	83
	1 bushel oats.....	1 6	25
	Tapping a pair of shoes.....	3 0	50
	1 loaf of bread.....	0 6	08
	1 shirt.....	7 0	1 17
	½ day, Elisha (son, 16 years old).....	1 0	17
	6 days, Ichabod (son, 13 years old).....	9 0	1 50
	2 days of oxen.....	3 0	50
	1 day, Eleazer (son, 11 years old).....	1 6	25
	Footing pair of socks.....	3 0	50
	Making two shirts.....	4 0	67
	½ bushel of salt.....	6 0	1 00
	7 yards check linen.....	1 1 0	3 50
	3 days scoring timber.....	9 0	1 50
	1½ bushels corn.....	4 6	75

## FARM PRICES IN TWO CENTURIES—Continued.

Connecticut currency, 6 shillings to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1776	2 pounds cheese.....	1 4	22
	5 yards tow cloth.....	15 0	2 50
	5½ pounds pork.....	2 3	38
	1 bushel rye.....	4 0	67
	4½ bushels potatoes.....	13 6	2 25
	Carting two loads wood and two loads knots.....	3 0	50
	4 bushels hay seed.....	6 0	1 00
	Plowing 2 acres of land.....	12 0	2 00
	1 day of oxen.....	2 0	33
1777	1 day hauling logs.....	6 0	1 00
	1 bushel oats.....	1 10	31
	23 pounds flax.....	1 13 6	5 58
	1 load wood.....	4 0	67
	1 day, plowing corn.....	2 6	42
	5 weeks' board.....	1 17 6	6 25
	2 days of oxen.....	6 0	1 00
	1 bridle.....	19 0	3 17
	1 load of wood.....	9 0	1 50
	2 loads of wood.....	12 0	2 00
	½ pound tea.....	2 6	42
	20 pounds pork, at 8d. a pound.....	13 4	2 22
	1½ bushels rye.....	4 6	75
	3 shocks of oats.....	9 0	1 50
1778	1 load of wood.....	6 0	1 00
	2¼ bushels of flaxseed.....	1 6	3 58
	1 bushel potatoes.....	3 0	50
	11 quarts corn.....	1 6	25
	2 days, my oxen.....	6 0	1 00
	1½ days, Ichabod and oxen.....	12 0	2 00
1779	2 days, hoeing corn.....	5 0	83

## FARM PRICES IN TWO CENTURIES—Continued.

Connecticut currency, 6 shillings to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1779	¼ day killing hogs.....	1 3	21
	12 pounds veal (1 quarter).....	3 0	50
	6 days, getting bark.....	15 0	2 50
	1 hog, 60 pounds, at 3d.....	15 0	2 50
	2 beeves' plucks, 24 pounds.....	4 0	67
	2 beeves' heads.....	1 8	28
	4 tripes.....	2 0	35
	2 days, mowing.....	6 0	1 00
	6 months' work, Ichabod (son, 17 years old), at £1 10s per month.....	9 0 0	30 00
	1 day, reaping.....	3 0	50
	1 day, weeding corn.....	2 6	42
	8 days, getting out flax.....	16 0	2 67
	1 day, mending fence.....	2 6	42
	¼ day, cutting bushes.....	1 3	21
	1 day, plowing with team.....	7 0	1 17
	3 days, cutting wood.....	6 3	1 00
	1 table.....	8 0	1 33
1780	5¼ pounds tobacco.....	2 9	46
	1 day, work at Wall's.....	3 0	50
	1 sheep.....	9 0	1 50
	1 bushel wheat.....	5 0	83
	Making one shirt.....	2 0	33
	Cutting wood at the door, 1 year and foddering.....	1 10 0	5 00
	3 days, cutting wood.....	6 0	1 00
	Cutting a load of wood.....	0 6	08
	1 day, piling wood.....	2 6	42
	1 load of wood.....	5 0	83
	1 day, work at brick kiln.....	3 0	50
1781	2 days, threshing.....	5 0	83

## FARM PRICES IN TWO CENTURIES—Continued.

Connecticut currency, 6 shillings to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1781	6 months' work by Eleazer (son, 16 years'old).....	7 10 0	25 00
	Making a door.....	10 0	1 67
	2 days, at Wall.....	6 0	1 00
	1 day, chopping wood.....	2 0	33
	½ day, setting apple trees.....	1 3	21
	2 days, mowing.....	6 0	1 00
	1 day, breaking flax.....	2 6	42
1782	16s. 3d., State money.....	8 1½	1 35
	2 days, carting stone.....	6 0	1 00
	1 day, hoeing corn.....	2 6	42
	1 day, reaping.....	3 0	50
	1 day, ditching.....	2 6	42
	2 days, breaking flax.....	5 0	83
	1 day, Eleazer, plowing.....	2 0	33
1783	1 day, hoeing.....	3 0	50
	1 day, reaping.....	4 0	67
	5 days, mowing (find victuals).....	1 0 0	3 33
	1 day, mowing.....	4 0	67
	1½ days, mowing.....	6 0	1 00
	Keeping one of your cattle winter of 1783.....	1 0	3 33
	4¼ bushels rye.....	12 4	2 06
	1 pair shoes.....	7 6	1 25
	1 pair bridle bits.....	1 0	17
	1 day, reaping.....	3 6	58
	2 days, breaking flax.....	5 0	83
	2 days, laying walls.....	6 0	1 00
	5 days, keeping cattle.....	5 9	96
	1 week, keeping mare.....	1 6	25
1785	1 pound tobacco.....	0 6	08
	1 pair old leather breeches.....	2 0	33
	1 day, threshing.....	2 6	42

## FARM PRICES IN TWO CENTURIES—Continued.

Connecticut currency, 6 shillings to the dollar.

Year.	ITEM CHARGED.	Early State currency.	United States currency.
1785	1 day, mowing.....	£ s. d. 4 0	Dollars. 67
	1 day, reaping.....	3 6	58
	1 day, breaking flax.....	2 6	42
	1 day, hoeing corn.....	3 0	50
	3½ weeks' board.....	1 2 0	3 67
	Taking care of your cattle in 1784.....	1 0 0	3 33
	1 bushel of wheat.....	7 0	1 17
	7 weeks 2 days' board, 3 children.....	3 6 0	11 00
	7 weeks' schooling, 3 children.....	7 0	1 17
	1 petticoat for Rebecca.....	1 0	17
	1 month's work (Eleazer, 20 years old).....	1 5 0	4 17
	1 pair new stockings.....	2 0	33
	13 weeks' board, Susanna, at 3s.....	1 19 0	6 50
	11 weeks, keeping a colt.....	6 0	1 00
	¼ bushel of onions.....	2 6	42
	3 pounds tobacco.....	1 6	25
1786	3 days riving shingles.....	9 0	1 50
	5 pounds tobacco at 6d.....	2 6	42
	¼ bushel potatoes.....	1 0	17
	40 pounds pork.....	1 0 0	3 33
	24 pounds cheese.....	12 0	2 00
	6 pounds butter.....	4 6	75
	1 day mowing.....	3 6	58
	2 days laying walls.....	6 0	1 00
	1 bushel of maslin (two kinds of grain mixed).....	4 0	76
	13 weeks keeping Susan Thomas, at 2s. 6d. per week.....	1 12 6	5 42
	Keeping 2 calves 3 weeks.....		
	Cloth for petticoat and shirt.....	6 0	1 00
	1 pound lard.....	0 6	08
	1½ bushels oats.....	3 9	63
1787	9 pounds 2 ounces of flax.....	6 0	1 00

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
1787	Letters of administration on estate .....	£ s. d. 12 0	Dollars. 1 60
	Survey of lot .....	3 4	44
1788	Drawing power of attorney .....	1 10	24
	Drawing a lease .....	3 9	50
	1 bushel wheat .....	5 0	67
	1½ bushels buckwheat .....	3 9	50
	3 bushels corn .....	9 0	1 20
	4 bushels potatoes .....	16 0	2 13
	7 pounds flax .....	4 8	62
	¼ ton of hay .....	1 5 0	3 33
	174 rods fence, at 1s. 6d. ....	13 1 0	34 80
	1 sheepskin .....	3 9	50
	Shoeing a horse .....	6 0	80
1789	8 days' board .....	8 0	1 07
	2 days' work on bridge .....	7 6	1 00
	1 pound tea .....	5 0	67
	1½ bushels rye .....	4 6	60
	¼ bushel flaxseed .....	1 10	24
	¼ ton hay .....	1 0 0	2 67
	8 days, keeping a horse .....	4 0	53
	¼ bushel potatoes .....	1 3	17
	1½ bushels wheat .....	7 6	1 00
	4¾ bushels oats .....	8 10	1 18
	1 day, oxen .....	2 0	27
1790	1 pound sugar .....	0 10	11
	3 pounds tobacco .....	2 0	27
	1 bushel of potatoes .....	2 6	33
	1 bushel rye .....	3 8	49
	2 bushels oats .....	3 9	50
	1½ bushels wheat .....	7 0	93

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1790	½ ton hay .....	1 0 0	2 67
	20 bundles straw .....	1 8	22
	1½ pounds flax .....	1 0	13
	4 bushels buckwheat .....	8 0	1 07
	1 load of wood .....	5 0	67
	1 pig, 63 pounds .....	15 9	2 10
1791	1½ bushels wheat .....	11 3	1 50
	½ bushel flaxseed .....	1 10	24
	½ bushel potatoes .....	1 3	17
	½ ton of hay .....	1 0 0	2 67
	4½ cords of wood .....	1 13 9	4 50
	2 bushels buckwheat .....	4 0	52
	2 quarts cider .....	0 6	06
	3 day' work .....	7 6	1 00
	14½ pounds flax .....	9 10	1 31
	15 bundles straw .....	1 3	17
	4½ pounds nails .....	4 6	60
	A plow to break up 2 acres .....	2 0	27
	2 shoats, weighed 40 pounds .....	1 0 0	2 67
	A cart, one day .....	1 0	13
	½ bushel of beans .....	3 9	50
1792	½ ton of hay .....	1 5 0	3 33
	1 bushel of oats .....	1 10	24
	149 pounds pork .....	2 18 10	7 84
	1 day of oxen .....	3 0	40
	4 bushels potatoes .....	8 0	1 07
	1 pound butter .....	1 3	17
	1 bushel peas .....	7 6	1 00
	13½ pounds veal .....	6 9	90
	5 bushels rye .....	15 0	2 00

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1792	10 bushels buckwheat .....	1 0 0	2 67
	10 quarts seed corn .....	1 0	13
	1 day of cart .....	1 0	13
1798	3 pounds flax .....	3 0	40
	1 bushel of salt .....	18 0	2 40
	1 horse $\frac{1}{2}$ day plowing corn .....	1 0	13
	131 fresh shad, at 4d .....	2 3 8	5 82
	20 pounds venison, at 3d .....	5 0	67
	3 deerskins .....	1 6 0	3 47
	100 apple trees .....	2 10 0	6 67
	1 day making rails .....	3 9	50
	Making a pair of shoes .....	4 6	60
	1 calfskin .....	4 6	60
	6 bushels turnips .....	9 0	1 20
	812 feet siding (white pine) .....	14 0	1 87
1793	2 bushels of corn .....	8 0	1 07
	1 pound butter .....	1 0	13
	1 bushel potatoes .....	2 6	33
	1 $\frac{1}{4}$ pounds cheese .....	1 0	13
	10 pounds flour .....	1 3	17
	2 bushels wheat .....	15 0	2 00
	42 pounds beef at 4d .....	14 0	1 87
	2 bushels oats .....	3 9	50
	2 bushels rye .....	7 6	1 00
	1 bushel buckwheat .....	2 6	33
	Carting a load of coal .....	3 0	40
	$\frac{1}{2}$ bushel peas .....	3 9	50
	2 pounds fat (lard) .....	1 4	18
	3 pounds tobacco .....	2 0	27
	25 bundles straw and carting .....	3 0	40



## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1793	1 pint of whisky .....	9	10
	A yoke of oxen, 1 day.....	2 6	33
	1 window sash .....	3 0	40
	1 gammon ham, 14 pounds.....	7 0	93
	200 pounds hay .....	5 0	67
1794	1 calfskin .....	7 6	1 00
	1½ days raking hay.....	5 6	73
	12 pounds old pork.....	8 0	1 07
	1 bushel corn .....	4 0	53
	1 bushel buckwheat.....	3 9	50
	10 pounds beef .....	5 0	67
	2½ pounds butter .....	3 0	40
	4 bushels rye .....	16 10	2 24
	Weaving 21¼ yards tow cloth.....	1 1 9	2 90
	Weaving 2 handkerchiefs.....	3 0	40
	1 pound hetcheled flax.....	2 0	27
	2 bushels potatoes.....	5 0	67
	Plowing 6 acres corn.....	9 0	1 20
	1½ bushels wheat.....	11 3	1 50
	1 bushel turnips.....	1 6	20
	1 yoke of oxen, 1 day.....	2 6	33
	¼ bushel peas.....	4 6	60
	6 bushels oats .....	7 6	1 00
	400 feet of boards.....	1 2 6	3 00
	Use of a cow 1 year.....	1 2 6	3 00
	37½ yards of two cloth.....	1 17 6	5 00
1795	1½ bushels rye, at 5s.....	7 6	1 00
	22 pounds beef .....	9 2	1 22
	1 pound butter .....	1 3	17
	4 pounds cheese.....	4 0	53

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1795	13½ pounds veal .....	5 0	67
	3 pounds flax .....	3 0	40
	3¼ pounds tallow .....	4 1	54
	1 day, a yoke of oxen .....	3 0	40
	4 yards weaving cloth .....	4 0	53
	A barrel (for cider) .....	7 6	1 00
	1½ day, a horse to plow .....	2 3	30
	1 day, use of a plow .....	1 0	13
	3 bushels rye, at 6s. ....	18 0	2 40
	1 bushel of turnips .....	2 0	27
	2 pounds pork .....	2 0	27
	Making a pair of shoes .....	4 6	60
1796	2 bushels potatoes .....	6 0	80
	6 pounds pork .....	6 0	80
	2 pounds lard .....	2 0	27
	1 pound butter .....	1 3	17
	2 bushels corn .....	8 0	1 07
	4 pounds veal at 6d. ....	2 0	27
	4 pounds venison .....	1 0	13
	½ bushel turnips .....	1 0	13
	1 bushel rye .....	5 0	67
	2 bushels buckwheat .....	6 0	80
	1 pound flax .....	4 0	52
	3 pounds tallow .....	5 3	70
	1½ bushels wheat .....	1 2 6	3 00
	1 cord wood .....	7 6	1 00
	1½ acres plowing .....	11 3	1 50
	½ a run of yarn spinning .....	6	7
	Making pair shoes, shoemaker finds the uppers .....	9 0	1 20

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1796	Making pair woman's shoes, shoemaker to find the sole leather.....	8 3	1 10 /
	Making pair shoes.....	4 6	60
	1 cord of bark (for tanner).....	11 3	1 50
	1 dozen pigeons.....	1 0	13
	1 deer skin.....	3 0	40
	1 hay rake.....	3 0	40
	6 fresh shad.....	2 0	27
	Tanning 2 sheepskins.....	6 0	80
	Weaving 9 yards cloth at 8d.....	6 0	80
	Weaving 28 yards cloth at 10d.....	1 3 4	3 11
	Tanning 1 bearskin.....	7 6	1 00
1797	Yoke of oxen 1 day.....	3 0	40
	4½ pounds pork.....	4 6	60
	1½ pounds butter.....	1 6	20
	1 pound tallow.....	1 6	20
	4½ pounds beef.....	2 3	30
	2 bushels oats.....	6 0	80
	4 pounds flax.....	4 0	53
	Tanning a dogs skin.....	3 0	40
	1 bushel of corn.....	3 9	50
	2 days pulling turnips.....	7 6	1 00
	1 quart of honey.....	3 0	40
	Making a pair of shoes.....	3 9	50
	1 dozen pigeons.....	1 0	13
	8 pounds bear's meat a 4d.....	2 8	36
	2 bearskins.....	1 10 0	4 00
	13 pounds venison at 3d.....	3 3	43
	1 bushel salt.....	18 0	2 40
	50 fresh shad at 4d.....	16 8	2 22
	1½ bushels of rye.....	7 6	1 00

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1797	Making pair men's shoes .....	4 6	60
	1 sheepskin .....	6 0	80
	2 bushels potatoes .....	6 0	80
	Use of a loom 1 year .....	15 0	2 00
	1 day mowing .....	5 0	67
	1 bushel flaxseed .....	3 9	50
	2 bushels buckwheat .....	7 6	1 00
	4 bushels potatoes .....	12 0	1 60
	Making pair shoes, shoemaker finds thread and heels .....	5 6	73
	2 bushels of corn .....	7 6	1 00
	Use of 1 acre ground, corn .....	11 3	1 50
1798	Weaving 21 yards cloth, 12d .....	1 1 0	2 80
	2 dozen pigeons .....	2 0	27
	1 bushel of rye .....	5 0	67
	1 bushel of corn .....	3 0	40
	1 bushel of oats .....	2 6	33
	6½ pounds beef .....	2 2	29
	2 bushels of buckwheat .....	6 0	80
	1 day cutting wood .....	3 9	50
	11 pounds veal at 6d .....	5 6	73
	Yoke of oxen 1 day .....	3 0	40
	1 ton hay .....	2 5 0	6 00
	1 almanac .....	0 9	10
1799	½ bushel of corn .....	1 10	24
	1 bushel of oats .....	2 6	33
	4 bushels rye .....	1 0 0	2 67
	3½ pounds cheese .....	3 6	47
	2 quarts salt .....	2 0	27
	6 pounds pork (fresh) .....	3 0	40
	9 pounds beef .....	4 6	60

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1799	1 bushel buckwheat .....	3 0	40
	1 pound butter .....	1 0	13
	1 pound tobacco .....	1 0	13
	1 bushel of wheat .....	7 6	1 00
	1 bushel of potatoes .....	3 9	50
	Use of bed 6 months .....	7 6	1 00
	8 meals of victuals .....	8 0	1 07
	6 pounds flax .....	6 0	80
	30 bundles of straw .....	2 6	33
	4½ yards tow cloth .....	12 5	1 66
	2 pounds bread .....	1 0	13
	100 pounds hay .....	3 0	40
	Weaving 8 yards cloth .....	4 0	53
	2½ pounds perk (salt) .....	2 6	33
	¼ day cradling .....	3 9	50
	8 pounds venison, at 3d .....	2 0	27
	Spinning 3 run and 5 knots .....	3 3	43
	1 shirt .....	12 6	1 67
	1 earthen porringer .....	0 6	7
	3 nights' lodging .....	1 0	13
	On the jury case of Lot and Son .....	2 0	27
	To a horse to go to 4th of July .....	1 8	22
1800	5¼ yards of cloth .....	17 6	2 33
	6 pounds salt pork .....	3 0	40
	1½ pounds tobacco .....	1	23
	2 bushels buckwheat .....	6 0	80
	2 quarts salt .....	2 0	27
	2½ pounds cheese .....	1 8	22
	A yoke of oxen one day .....	3 0	40
	3 pounds butter .....	3 9	50

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1800	1 quart soap (soft) .....	0 6	7
	3 bushels ashes .....	2 0	27
	1½ bushels rye .....	7 6	1 00
	12½ pounds beef .....	4 3	57
	2 pounds flax .....	2 6	33
	300 pounds hay .....	7 6	1 00
	½ bushel beans .....	4 0	53
	100 fresh shad .....	1 13 4	4 44
	1 days' work .....	3 9	50
	Weaving 28½ yards cloth .....	1 4 0	3 20
	1 dozen pigeons .....	1 0	13
	25 pounds venison, at 3d .....	6 3	83
	1½ bushels turnips, at 1s. 6d .....	2 3	30
	24 pounds fresh pork, at 4d .....	8 0	1 07
	6 salt shad .....	4 0	53
	3 quarts whisky .....	5 7½	75
	Making 1 pair of shoes .....	4 6	60
	1 bushel of wheat .....	10 0	1 33
	Oxen and plow ½ day .....	1 6	20
	½ bushel of corn .....	1 10	24
1801	1 bushel of wheat .....	10 0	1 33
	2 yards tow cloth .....	6 0	80
	1 pound butter .....	1 0	13
	1 bushel of potatoes .....	3 0	40
1801	1 bushel of buckwheat .....	3 9	50
	Two days' threshing .....	6 0	80
	11 pounds flax .....	13 9	1 83
	Yoke of oxen one day .....	3 0	40
	1 hog, 100 pounds weight .....	2 10 0	6 67
	12½ pounds beef .....	4 3	57

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
1801	One day plowing .....	£ s. d. 11 3	Dollars. 1 50
	2½ bushels of oats .....	6 3	83
	2½ pounds tobacco .....	5 0	67
	2 pounds cheese at 8d .....	1 4	18
	12 pounds honey, at 1s .....	12 0	1 60
	6 pounds 6 ounces cheese, at 10d .....	5 4	71
	Making pair women's shoes .....	3 9	50
	1 broadax .....	11 3	1 50
	1 bushel of rye .....	3 9	50
	10 pounds bear meat .....	3 4	44
	1 day breaking flax .....	3 9	50
	6 salt shad, at 8d apiece .....	4 0	53
	¼ bushel wheat .....	3 9	50
	1 quart whisky .....	1 10	24
	1 coffee pot and 2 tin cups .....	5 0	67
	Shoemaker sewing up pair leather overalls .....	3 9	50
	1 peck beans .....	2 6	33
	80 fresh shad, at 4d .....	1 6 8	3 55
	Spinning 6½ knots shoe thread .....	0 6	7
	300 cwt. of hay .....	6 9	90
	¼ bushel of Indian corn .....	1 10	24
1802	3 pounds of candles .....	4 6	60
	1 bushel wheat .....	7 0	93
	1½ pounds butter .....	1 7	21
	½ ton hay .....	1 10 0	4 00
	2 bushels buckwheat .....	6 0	80
	1 bushel oats .....	2 6	33
	Weaving 24 yards cloth .....	18 0	2 40
	¼ bushel of corn .....	1 10	24
	2½ pounds tobacco, at 10d .....	2 0	27

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1802	1 deerskin, at \$3.50 .....	1 6 3	3 50
	1 peck flaxseed.....	1 10	24
	2 yards linen cloth, at 3s 9d.....	7 6	1 00
	3½ yards woollen cloth, at 4s.....	14 0	1 87
	Making a pair of shoes.....	4 6	60
	3 pounds 12 ounces honey, at 1s.....	3 9	50
	1 testament .....	2 6	33
	Spinning 3 run tow yarn.....	3 0	40
	1 week spinning.....	5 0	67
	1 dozen pigeons.....	1 0	13
	1 wether sheep, \$4.....	1 10 0	4 00
	Piece of hog skin for moccasins.....	3 9	50
	43 pounds fresh pork.....	19 0	2 53
	Making a pair of boots .....	13 6	1 80
	Making a pair of leather overalls.....	5 0	67
	1 day washing .....	1 6	20
	Making a pair of moccasins.....	2 0	27
	4 bushels rye.....	15 0	2 00
	5 pounds of beef, at 4d.....	1 8	22
	Vamps and counters for boots.....	3 9	50
	1 day threshing buckwheat.....	3 9	50
	3 pounds 4 ounces cheese, at 10d.....	2 10	38
	4 salt shad.....	2 8	36
	My oxen to harrow, half day.....	1 3	17
1803	2 bushels wheat.....	12 6	1 67
	14 pounds of beef.....	5 10	78
	5 pounds tallow.....	5 0	67
	1 bushel buckwheat.....	3 0	40
	1 bushel corn.....	3 9	50
	2 bushels oats.....	5 0	67



## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
1803	1 meal of victuals.....	£ s. d. 0 1	Dollars. 13
	1 night's lodging.....	0 4	4
	1 night keeping a horse.....	1 0	13
	1 yard striped linen cloth.....	3 9	50
	2 pounds of wool, at 2s.....	4 0	53
	3 pecks salt.....	11 3	1 50
	2 day's work sewing.....	7 6	1 00
	1 pound roll tobacco.....	2 0	27
	2 bushels rye.....	7 6	1 00
	1½ leaf tobacco.....	1 6	20
	1½ bushels potatoes.....	3 9	50
	1 bushel turnips.....	1 6	20
	25 heads cabbage.....	8 0	1 07
	5 pounds, 12 ounces rye flour at 2¼d.....	1 2	16
	2 pounds of butter, at 1s.....	2 0	27
	½ pound wool.....	2 6	33
	1 bushel buckwheat.....	4 6	60
	Spinning 4 run of yarn.....	4 0	53
	Making pair of shoes.....	4 6	60
	Making pair of boots.....	12 0	1 60
	Soling pair of boots.....	3 0	40
	Footing pair stockings.....	4 0	53
	3 pairs socks, 5s. per pair.....	15 0	2 00
	2 quarts salt.....	2 0	27
	10 pounds venison, at 3d.....	2 6	33
1804	2 days' carting logs.....	6 0	80
	14½ pounds veal, at 5d.....	6 0	80
	1 pound tobacco.....	1 0	13
	1 bushel wheat.....	7 6	1 00
	1 load of wood.....	5 7	74

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1804	2 bushels rye.....	8 0	1 07
	Making a pair of boots.....	12 0	1 60
	Making coat and waistcoat.....	16 10	2 24
	64 apple trees.....	3 4	44
	1 bushel turnips.....	1 6	20
	1½ bushels potatoes.....	3 9	50
	Use of cider mill to make 5 barrels of cider.....	4 0	53
	2 pounds pork.....	2 0	27
1805	1 bushel of potatoes.....	3 9	50
	6 pounds 14 ounces of veal at 5d.....	3 0	40
	1 bushel of flaxseed.....	8 6	1 13
	Making a pair of shoes.....	4 6	60
	4 quarts of beans.....	1 4	18
	1 pound of honey.....	1 0	13
	14 pounds 8 ounces of venison.....	3 8	49
	Soling a pair of moccasins.....	1 0	13
	1 peck of seed wheat.....	2 3	30
	Making a pair of boots.....	14 0	1 87
1806	1 bushel of corn.....	4 6	60
	19 pounds of venison, at 5d.....	4 9	63
	½ bushel of potatoes.....	1 6	20
	1 pound 2 ounces tobacco.....	1 6	20
	5 pounds hog's lard.....	5 0	67
	3 pecks of beans.....	5 7	74
	6½ yards tow and linen cloth.....	-----	3 45
	2 pounds of wool.....	7 6	1 00
	1 bushel of wheat.....	7 6	1 00
	1 pound 4 ounces butter.....	1 3	17
	1 barrel cider.....	15 0	2 00
	1 day mowing.....	5 0	67

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d. 12 6	Dollars. 1 67
1806	Weaving 12½ yards linen .....		
	6 months' schooling, 2 children .....	8 2	1 09
	1 bushel of oats .....	3 0	40
	Making a pair of moccasins .....	2 0	27
	8 bushels of ashes .....	5 4	71
	Spinning two run linen yarn .....	2 0	27
	½ barrel cider .....	7 6	1 00
1807	23 barrels flour .....	8 7	1 14
	1 bushel of oats .....	1 10	24
	3 pecks of wheat .....	4 9	63
	4 pounds 6 ounces butter .....	4 5	59
	1 pound 8 ounces cheese .....	1 2	16
	2 pounds 4 ounces of lard .....	2 3	30
	12 pounds 12 ounces of salt pork .....	12 9	1 70
	1 day mowing .....	5 0	67
	1 deerskin .....	5 0	67
	26 pounds venison .....	8 10	1 18
	1 pound 6 ounces wool .....	5 1	68
	Making pair moccasins .....	2 0	27
	Making pair of overalls .....	6 0	80
	2 pounds 12 ounces of flax .....	2 9	37
	Spinning 24 knots tow yarn .....	1 3	17
1808	2 bushels of oats .....	5 0	67
	9 pounds honey .....	9 0	1 20
	2,000 feet of boards at Bear Creek .....		10 00
	1,500 shingles .....		3 75
	11 pounds salt pork .....	11 0	1 47
	2 bushels potatoes .....	6 0	80
	120 apple trees .....		16 00
	2 pounds 4 ounces lard .....	2 3	30

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1808	1 pound 6 ounces wool.....	5 1	68
	7 days' tailoring by Asham.....		5 53
	1 bushel buckwheat.....	3 9	50
	1 peck of beans.....	3 0	40
	1 hog, 156 pounds, at 6 cents.....		9 36
	1 pound butter.....	1 0	13
	1 barrel of cider.....	15 0	2 00
	Spinning five run of linen.....	5 0	67
	Spinning two run woolen yarn.....	2 0	27
	3 bushels of rye.....		2 00
1809	1 pound butter.....	1 0	13
	2 pounds 2 ounces cheese.....	1 4	18
	½ pound lard.....	0 5	6
	2 bushels of oats.....	5 0	67
1809	2 bushels of corn, at 4s 6d.....	9 0	1 20
	23 pounds iron, at 6 cents.....		1 38
	13½ pounds veal, at 6d.....	6 9	90
	1 bushel potatoes.....	3 0	40
	2 pounds cheese.....	2 0	27
	1 pair of boots, at \$5.50.....	2 1 3	5 50
	1 pair woman's shoes.....	11 3	1 50
	Pulling a tooth.....	1 0	13
	Dressing a deerakin.....	4 0	53
	One-half pound lard.....	0 5	6
	Making a plow.....	11 3	1 50
	2 quarts of salt.....	0 10	11
1810	7 pounds 12 ounces pork, at 1s.....	7 9	1 03
	3 bushels potatoes.....	9 0	1 20
	2 bushels rye.....	15 0	2 00
	2 quarts vinegar.....	1 6	20

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1810	5 pounds 12 ounces salt pork, at 13.....	5 9	77
	17 pounds iron, at 6 cents .....		1 02
	1 pound butter.....	1 0	13
	124 pounds beef, at 5 cents.....	2 6 6	6 30
	1 peck onions.....	1 10	24
	6 quarts of seed corn .....	1 4	18
	13 pounds 4 ounces veal, at 6 cents.....		80
	4 pounds honey.....	4 0	53
	2 pounds 10 ounces of tow, at 6d.....	1 4	18
	3 days' work at flax.....	11 3	1 50
	Weaving 14 yards cloth.....	12 1	1 61
1811	One and a half bushels buckwheat.....		60
	1 bushel potatoes.....		40
	2 pounds candles.....		40
	Knitting one stocking.....	1 10	24
	1 day cradling.....	7 6	1 00
	3 yards check linen .....		1 50
	178 pounds fresh pork, at 7 cents.....		12 46
	3 pounds 12 ounces cheese, at 11 cents.....		40
	6 bushels rye at 5s.....	1 10 0	4 00
	One-half gallon of vinegar.....		13
	1 barrel cider.....		3 00
	1 day mowing.....	5 0	67
	10 pounds 10 ounces venison, at 3d.....	2 8	36
	4 yards woolen cloth.....		2 70
	1 pound of flax.....	1 0	13
	1 deerskin.....	1 0 0	2 67
1812	One and a half bushels potatoes.....		75
	Making one linen coat.....		3 00
	1 bushel seed buckwheat .....		1 00

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State currency.	United States currency.
		£ s. d.	Dollars.
1812	2 barrels cider.....	.....	3 00
	3 dozen pigeons.....	5 7	74
	14 pounds fresh pork, at 6 cents .....	6 3	83
	33 pounds rye flour.....	7 5	99
	4 pounds honey .....	4 0	53
	65 pounds fresh beef, at 5 cents.....	.....	3 25
1813	2 bushels potatoes.....	.....	1 00
	1 pound 12 ounces pork.....	.....	20
	2 pounds of butter .....	.....	26
	2 bushels rye.....	1 50	2 00
	2 pounds 8 ounces cheese .....	.....	40
	3 pounds honey.....	.....	40
	1 gallon vinegar .....	.....	40
	2 gallons cider .....	.....	40
	1 day cradling .....	7 6	1 00
	1 day mowing .....	5 0	67
	7 days' work at 50 cents .....	.....	3 50
	7 pounds 4 ounces salt beef.....	.....	43
1814	2½ bushels wheat at \$1.50 .....	.....	3 75
	1½ bushels rye at 75 cents.....	.....	1 12
	One-half bushel potatoes.....	.....	25
	1 pound hog's fat.....	.....	13
	1 swarm of bees .....	.....	3 50
	1 day cradling rye.....	.....	1 00
	1 day hoeing corn.....	.....	60
	12 pounds wheat flour, at 4 cents .....	.....	48
	1 bushel clover seed in the chaff .....	.....	60
	1 pound hogs' fat.....	.....	13
	8 candles .....	.....	16
	2 tons hay .....	.....	10 00

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State currency.	United States currency.
		£ s. d.	Dollars.
1814	Spinning 5 run of linen .....	.....	5
	3 quarts of clover seed .....	.....	94
	12 pounds 2 ounces beef at 7 cents .....	.....	85
	1 day mowing clover .....	.....	80
1815	2 bushels rye at 75 cents .....	.....	1 50
	2 bushels oats, at 40 cents .....	.....	80
	1 bushel corn .....	.....	75
	1½ bushels beans .....	.....	2 25
	¾ bushel onions .....	.....	50
	7 pounds, 12 ounces salt pork, at 13 cents .....	.....	1 00
	5 pounds cheese, at 12½ cents .....	.....	63
	6 pounds bear meat, at 6 cents .....	.....	36
	6 bushels potatoes .....	.....	2 60
	1 day splitting rails .....	.....	40
	1 day threshing .....	.....	50
	3 days breaking flax .....	.....	1 50
	4 pounds, 12 ounces veal, at 5 cents .....	.....	23
	10 ounces honey .....	.....	8
	¾ pounds candles .....	.....	12
	1 ton plaster .....	.....	13 00
	1 scythe .....	.....	1 85
	Laying a pair of shears .....	.....	80
1816	1 bushel of corn .....	.....	75
	1 bushel of potatoes .....	.....	50
	1 bushel of rye .....	.....	75
	7 pounds, 12 ounces fresh beef, at 6 cents .....	.....	46
	1 quart of soap .....	.....	06
	4 pounds, 14 ounces butter, at 25 cents .....	.....	1 22
	6 pounds 4 ounces honey, at 14 cents .....	.....	87
	2 quarts beans .....	.....	12

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1816	1 hive of bees.....	.....	4 50
	Making one plow.....	.....	2 00
	1 pail.....	.....	50
	1 day thrashing rye.....	.....	50
	Making a pair of overalls.....	.....	1 00
	31 pounds venison, at 5 cents.....	.....	1 55
1817	1 bushel of wheat.....	.....	2 00
	4 bushel of rye, at \$1.25.....	.....	5 00
	1 bushel of buckwheat.....	.....	50
	6 pounds rye flour, at 4 cents.....	.....	24
	1 sheepskin.....	.....	50
	2 pounds 8 ounces honey, at 13 cents.....	.....	33
	1 bushel potatoes.....	.....	50
	500 of hay.....	.....	2 00
	Making a pair of boots.....	.....	3 00
	Making a pair of shoes.....	.....	60
	Footing boots.....	.....	1 60
	4 pounds 12 ounces beef, at 8 cents.....	.....	35
	2½ day's work by a tailor, mending.....	.....	2 00
	1 hive of bees.....	.....	4 50
	14 pounds, 8 ounces veal, at 8 cents.....	.....	1 16
	1 day butchering.....	.....	75
	1 day mowing.....	.....	1 00
1818	2 bushels of potatoes, at 62½ cents.....	.....	1 25
	1½ bushels rye, at 100 cents.....	.....	1 50
	4 bushels buckwheat, at 60 cents.....	.....	2 40
	18 pounds rye flour, at 4½ cents.....	.....	81
	1 nutmeg.....	.....	12½
	12 pounds veal at 8 cents.....	.....	96
	1 hive of bees.....	.....	4 00



## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State currency.	United States currency.
		£ s. d.	Dollars.
1818	1 day chopping.....	-----	50
	15 pounds 10 ounces of honey at 20 cents .....	-----	3 12
	½ ton of plaster at \$17.00.....	-----	8 50
	1 day, yoke of oxen .....	-----	50
	Making a pair of boots.....	-----	3 00
	Making a pair of shoes.....	-----	75
	1 dozen tacks.....	-----	6½
1819	2 bushels buckwheat at 50 cents .....	-----	1 00
	2 bushels salt, at \$1.75 .....	-----	3 50
	1 bushel corn.....	-----	75
	1 bushel potatoes.....	-----	50
	10 days' tailoring (Askam).....	-----	8 00
	1 day picking stones.....	-----	50
	11 pounds 8 ounces honey .....	-----	1 50
	2 shad, at 18 cents .....	-----	36
	2 tons of hay .....	-----	10 00
	½ ton of plaster at \$17.00.....	-----	8 50
	8 pounds 4 ounces salt pork, at 14 cents .....	-----	1 15
	4 bushels rye.....	-----	3 00
	14 pounds 8 ounces veal at 6 cents .....	-----	86
	2 days' mowing .....	-----	1 50
	18 pounds rye flour at 4½ cents .....	-----	81
1820	Sold oxen to Edward Inman for.....	-----	60 00
	1 bushel potatoes.....	-----	40
	1 bushel and 1 peck of rye.....	-----	62
	2 days' mowing .....	-----	1 00
	Splitting 80 rails .....	-----	50
	5 pounds veal, at 6 cents.....	-----	30
	12½ bushels apples, at 12½ cents .....	-----	1 56
	7 days' haying, at 50 cents.....	-----	3 50

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars
1820	1 weeks' board .....		1 25
	Cow pastured at 15 cents per week .....		15
	1 dozen tacks .....		12½
	53 pounds rye flour at 2 cents .....		1 06
	14 pounds honey at 12½ cents .....		1 75
	1 barrel of cider .....		2 00
	3 bushels of corn .....		1 50
1821	3 bushels of apples at 25 cents .....		75
	1 pound and 8 ounces butter at 10 cents .....		15
	2 bushels rye at 40 cents .....		80
	1 bushel potatoes .....		30
	1 barrel cider .....		2 00
	104 pounds beef at 3 cents .....		3 12
	20 pounds honey at 10 cents .....		2 00
	2 pounds 8 ounces tallow at 15 cents .....		38
	Tailor making linen coat .....		2 50
	14 pounds fresh pork at 5 cents .....		70
	31 pounds fresh beef at 5 cents .....		1 55
	10 pounds 12 ounces veal at 5 cents .....		54
1822	1 bushel potatoes .....		50
	One-half bushel onions .....		30
	1 load of coal .....		1 50
	1½ bushels of rye at 91 cents .....		1 37
	5 pounds 12 ounces salt pork at 8 cents .....		46
	1 day mowing .....		50
	1 grate for burning coal, 44 pounds at 6 cents .....		2 64
	2 quarts of salt at 6 cents .....		12
	6 bushels apples at 25 cents .....		1 50
	1 day chopping .....		40
	1 bushel clover seed .....		7 00

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1822	1½ pounds of iron at 6 cents .....	-----	9
	Making a linen coat .....	-----	1 50
	1 saddle .....	-----	16 00
	12 pounds veal at 5 cents .....	-----	60
	20 bundles of straw .....	-----	10
	300 weight of hay .....	-----	1 00
	One-half bushel of beans .....	-----	50
1823	One-half ton of hay .....	-----	3 50
	3 pounds 8 ounces honey .....	-----	42
	2 pounds 6 ounces cheese .....	-----	15½
	Pasturing a cow 3 weeks .....	-----	75
	1 bushel buckwheat .....	-----	62
	1 pound 4 ounces butter 12½ cents .....	-----	15½
	1½ gallons metheglin at 30 cents .....	-----	45
	4 bushels potatoes at 40 cents .....	-----	1 60
	2 bushels rye at 75 cents .....	-----	1 50
	10 bundles of straw .....	-----	20
	5 pounds 12 ounces salt beef at 6 cents .....	-----	34
	1 day chopping wood .....	-----	40
	One-half pound lard .....	-----	05
	Knitting one sock .....	-----	12
	One-half bushel onions .....	-----	30
	1 peck of beans .....	-----	25
	Weaving 33 yards at 12½ cents .....	-----	4 12½
	6 pounds 14 ounces salt pork at 10 cents .....	-----	68
	One-half bushel of apples .....	-----	25
1824	1 bushel of rye .....	-----	50
	One-half bushel white beans .....	-----	50
	1 pound of beeswax .....	-----	30
	1 pound honey .....	-----	12½

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1824	3 days' work .....		1 50
	400 pounds hay at \$7 per ton .....		1 40
	4 bushels potatoes at 30 cents .....		1 20
	6 pounds 6 ounces wheat flour 3 cents .....		20
	1 pound 4 ounces of butter at 12½ cents .....		15½
	8 pounds 12 ounces salt pork at 10 cents .....		86
	18 pounds veal at 5 cents .....		90
	1 pound of lard at 10 cents .....		10
	To oxen and cart one day .....		50
	1 pair of shoes .....		1 75
	To a cow and calf .....		15 00
	1 gallon of cider .....		20
	1 day's work in the coal bed .....		50
1825	2 pounds butter at 12½ cents .....		25
	10 pounds honey .....		1 00
	15 pounds salt pork at 8 cents .....		1 20
	3 quarts of soap .....		24
	1 pound 6 ounces lard .....		15
	Oxen and cart 1 day .....		50
	1 day mowing .....		50
	3 bushels potatoes .....		75
	One-half bushel of rye .....		25
	1 day cradling .....		1 00
	28 pounds 8 ounces of fresh beef at 3 cents .....		86
	1 day, team and hand .....		1 00
	One-half ton of hay .....		3 00
	Knitting a pair of socks .....		25
	15 pounds of veal at 5 cents .....		75
	1 fur hat .....		3 00
1826	2 bushels potatoes .....		80

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
1826	115 pounds fresh beef at 5 cents .....	£ s. d.	Dollars. 5 75
	1 day butchering .....		50
	7 pounds honey at 10 cents .....		70
	Hauling 3 loads of coal .....		60
	1 gallon of cider .....		15
	2 pounds of butter at 11 cents .....		22
	1 gallon metheglin .....		30
	2 pounds 12 ounces fresh pork at 5 cents .....		13
	3 days' work breaking flax .....		1 20
	4 yards linen cloth, 32½ cents .....		1 30
	6 months, Reuben Marcy, (a boy of 17 years), at \$5 per month .....		30 00
	4 yards of tow cloth at 25 cents .....		1 00
1827	4 bushels of rye at 50 cents .....		2 00
	½ bushel potatoes .....		20
	43½ pounds beef at 4 cents .....		1 74
	7 pounds 2 ounces salt pork at 8 cents .....		57
	23 pounds of rye flour at 2 cents .....		46
	4 pounds honey at 10 cents .....		40
	1 day mowing .....		50
	3 tons coal at Bennett bed .....		3 62
	4 pounds 12 ounces tallow at 10 cents .....		48
	1 gallon cider .....		20
	2 days breaking flax .....		1 00
	1 pound 8 ounces butter .....		21
	1 bushel beans .....		1 00
	30 bundles of straw .....		60
	18½ pounds fresh pork at 5 cents .....		91
	1 quart of salt .....		6
1828	6 bushels rye at 50 cents .....		3 00

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
1826	5 pounds lard at 10 cents.....	£ s. d.	Dollars. 50
	15 pounds veal at 4 cents .....	.....	60
	1 gallon of soap .....	.....	25
	6 pounds 4 ounces tallow at 10 cents.....	.....	62
	1 peck of beans.....	.....	25
	5 pounds of honey at 10 cents .....	.....	50
	2 bushel of rye at 50 cents.....	.....	1 00
	5 pounds 2 ounces salt pork at 10 cents .....	.....	51
	¼ bushel potatoes .....	.....	20
	3 tons coal at Babb's bed.....	.....	3 75
	1 pound tobacco.....	.....	12½
	3½ days cradling.....	.....	3 50
	1 pound 10 ounces butter .....	.....	16
	1 day mowing.....	.....	50
	4 pounds cheese at 8¼ cents .....	.....	25
	50 bundles of straw.....	.....	1 00
1829	2 bushels rye at 62½ cents .....	.....	1 25
	2 bushels potatoes at 40 cents .....	.....	80
	8 heads of cabbage at 10 cents.....	.....	80
	8 pounds 14 ounces salt pork at 10 cents.....	.....	88
	9 pounds 8 ounces fresh beef at 4 cents.....	.....	38
	1 day mowing.....	.....	50
	1 day cradling.....	.....	1 00
	10 bushel apples at 12½ cents.....	.....	1 25
	40 cabbage heads.....	.....	3 00
	Shearing 4 sheep.....	.....	12
	7 pounds 14 ounces fresh pork at 5 cents.....	.....	38
	3 bushels of beans.....	.....	3 00
	15 pounds of veal at 4 cents .....	.....	60
	3 pounds 14 ounces honey at 10 cents.....	.....	38

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State currency.	United States currency.
		£ s. d.	Dollars.
1830	11 pounds 10 ounces wheat flour.....	.....	25
	5 bushels rye at 50 cents .....	.....	2 50
	17 pounds 8 ounces salt pork at 10 cents .....	.....	1 75
	2 days mowing at 60 cents .....	.....	1 25
	1 day killing hogs .....	.....	50
	1 barrel cider.....	.....	1 00
	2 pounds butter at 14 cents .....	.....	28
	2 pounds lard at 10 cents.....	.....	20
	4 pounds 14 ounces honey at 10 cents.....	.....	48
	7 pounds fresh pork at 5 cents .....	.....	35
	Shearing 4 sheep at 3 cents.....	.....	12
	21 pounds veal hindquarter at 5 cents .....	.....	1 05
	15 bundles of straw at 2 cents .....	.....	30
	5 bushels of potatoes at 40 cents.....	.....	2 00
	1 day threshing .....	.....	50
	18 pounds 14 ounces fresh beef at 4 cents .....	.....	75
1831	1 bushel 1 peck of wheat at \$1.....	.....	1 25
	12 pounds 4 ounces salt pork at 10 cents.....	.....	1 22
	21 pounds honey at 10 cents.....	.....	2 10
	2 bushels of corn.....	.....	1 00
	1 day mowing.....	.....	60
	17 pounds fresh beef at 5 cents.....	.....	85
	2 bushels of wheat.....	.....	2 00
	3 pounds 6 ounces veal at 6 cents .....	.....	20
	12 ounces of beeswax .....	.....	16
	2 bushels of beans .....	.....	2 00
1832	3 pounds 12 ounces of salt pork at 10 cents.....	.....	38
	2 bushels of buckwheat at 37½ cents .....	.....	75
	6 pounds 12 ounces honey in the comb at 10 cents .....	.....	66
	2 bushels of corn at 50 cents.....	.....	1 00

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1832	1 gallon of cider .....	.....	20
	1 pound 10 ounces dried beef at 8 cents .....	.....	13
	10 meals victuals .....	.....	75
1833	Hauling 1 load of coal .....	.....	25
	1 fanning mill .....	.....	22 00
	10 bushels of potatoes at 31¼ cents .....	.....	3 12
	1 ton of coal .....	.....	1 00
	12 pounds venison at 5 cents .....	.....	60
	2 pounds 14 ounces salt pork at 10 cents .....	.....	26
	12 pounds 10 ounces fresh pork at 6 cents .....	.....	76
	12 pounds 12 ounces strained honey at 10 cents .....	.....	1 27
	4 pounds beeswax .....	.....	80
	1 day killing hogs .....	.....	50
	10 bushels of rye at 65 cents .....	.....	6 50
	5 bushels of potatoes at 31 cents .....	.....	1 55
1834	4 bushels of rye at 65 cents .....	.....	2 60
	1½ bushels of potatoes .....	.....	46
	1 ton of coal .....	.....	1 00
	1 bushel of apples .....	.....	37½
	1 fowl .....	.....	12½
	8 pounds 6 ounces salt pork at 10 cents .....	.....	84
	100 pounds of hay .....	.....	65
	1 pound 8 ounces of butter .....	.....	18
	4 pounds of cheese at 6¼ cents .....	.....	25
	3 days' mowing at 62 cents .....	.....	1 88
	13 pounds honey at 10 cents .....	.....	1 30
	13 pounds 4 ounces of veal at 4 cents .....	.....	53
	¾ day cradling at 100 cents .....	.....	75
	12 pounds 12 ounces fresh beef at 4 cents .....	.....	51
	2 dozen pigeons .....	.....	50



## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
1835	5½ bushels of buckwheat, at 40 cts .....	£ s. d.	Dollars, 2 20
	1 ton of coal .....		1 00
	½ bushel of potatoes .....		25
	1 bushel of turnips .....		25
	2 pounds butter at 15 cts .....		30
	9 pounds wheat flour at 3 cts .....		27
	13 pounds 4 ounces honey at 10 cts .....		1 33
	21 pounds 8 ounces beef at 4 cts .....		86
	3 days' haying .....		1 50
1836	Cow pasture, 5 weeks, at 25 cts .....		3 75
	½ bushel potatoes at 50 cts .....		25
	½ bushel turnips .....		13
	2 bushels of rye at 75 cts .....		1 50
	1 bushel of corn .....		80
	½ bushel of apples .....		50
	4 pounds of butter at 15 cts .....		60
	6 pounds of lard at 12½ cts .....		75
	3 pounds of honey at 10 cts .....		30
	2 dozen eggs at 12½ cts .....		25
	3 pints of vinegar .....		9
	9 pounds 8 ounces pork at 8 cts .....		78
	3 pounds 4 ounces salt pork at 12½ cts .....		40
1837	12 pounds fresh pork at 8 cts .....		96
	2 quarts of beans at 6 cts .....		12
	Horse and sleigh to go to town .....		50
	1 pound of butter .....		18
	10 pounds 14 ounces fresh beef at 5 cts .....		54
	6 pounds 6 ounces salt pork at 12½ cts .....		80
	9 pounds 12 ounces cheese .....		82
	2 pounds honey .....		25

## FARM PRICES IN TWO CENTURIES—Continued.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
1837	Oxen to plow, 1 day.....	£ s. d.	Dollars.
	9 weeks' cow pastured at 25 cts.....		2 25
	½ bushel turnips.....		12
	1½ dozen eggs.....		18
	1 bushel of apples.....		37½
	½ ton of coal at 100 cts.....		50
1838	1 bushel of potatoes.....		50
	1 bushel of turnips.....		25
	10 pounds 14 ounces veal at 6 cts.....		65
	3 bushels of rye to pay 3 days' mowing.....		
	2 pounds honey.....		25
	Pasturing a cow 5 weeks at 25 cts.....		1 25
	2 pounds sugar.....		30
	9 pounds 12 ounces gammon at 12½ cts.....		1 22
	Horse and wagon to go to town.....		50
	1 day oxen and cart to haul wood.....		50
	Making pair shoes, find the uppers.....		1 20
1839	1 bushel of potatoes.....		50
	2 pounds butter at 20 cts.....		40
	12 pounds 8 ounces veal at 6 cts.....		75
	3 days' work mowing at 75 cts.....		2 25
	1 washboard.....		37
	Horse and wagon to go to town.....		50
	1 day oxen and cart.....		37
	1 bushel turnips.....		25
1840	130 pounds beef at 7 cts.....		9 10
	11 pounds 12 ounces veal at 5 cts.....		52
	Making a coat (Askam, tailor).....		3 00
	2 pounds 14 ounces beeswax.....		73
1841	½ bushel of salt.....		50

## FARM PRICES IN TWO CENTURIES—Concluded.

Pennsylvania currency, 7 shillings 6 pence to the dollar.

Year.	ITEM CHARGED.	Early State cur- rency.	United States cur- rency.
		£ s. d.	Dollars.
1823	51 pounds pork at 5 cts .....	.....	2 55
	½ bushel of potatoes.....	.....	19
	5 pounds of tallow at 13 cts .....	.....	65
	27 pounds fresh beef at 6 cts .....	.....	1 62
	2 pounds of honey .....	.....	20
	2 dozen eggs at 12½ cts .....	.....	25
	¼ gallon of molasses.....	.....	25
	½ bushel of apples.....	.....	37
	2 bushels wheat bran at 25 cts .....	.....	50
	5 quarts little onions at 6¼ cents.....	.....	31
	½ pound butter at 16 cents.....	.....	8
	3 quarts beans .....	.....	18
	4¼ bushels of turnips at 25 cents.....	.....	1 12
	4 weeks' and 6 days' board at \$2 25.....	.....	9 92
1842	4 pounds of honey at 12½ cents.....	.....	50
	1 peck of beans .....	.....	37½
	1 pound 4 ounces tallow .....	.....	17
	½ bushel turnips.....	.....	12
	30 cabbage heads .....	.....	90
	1 barrel wheat flour.....	.....	7 00

### AVERAGE WAGES OF UNITED KINGDOM.

According to Mr. Giffen, the average wages of various parts of the United Kingdom were as follows for the years 1830 and 1880:

COUNTRIES AND DISTRICTS	1830	1880
Surrey .....	\$2 55	\$3 90
Sussex .....	2 37	3 40
Kent .....	2 92	3 90
Hartford .....	2 25	2 16
Northampton .....	2 25	3 16
Bedford .....	2 25	3 16
Essex .....	2 52	3 28
Suffolk .....	2 52	3 28
Norfolk .....	2 52	3 28
Wells .....	1 95	2 92
Dorset .....	1 82	3 03
Devon .....	1 95	3 28
Somerset .....	2 11	3 16
Gloucester .....	2 19	3 04
Hereford .....	1 95	3 40
Salop .....	2 19	3 52
Stafford .....	2 92	3 90
Warwick .....	2 43	3 90
Lincoln .....	2 92	3 28
Nottingham .....	2 92	3 28
Derby .....	2 92	3 28
Cheshire .....	3 16	3 77
York .....	2 92	4 25
Average increase for United Kingdom, 50 per ct.		
Durham .....	2 92	4 37
Northumberland .....	2 92	4 37
Westmoreland .....	2 92	4 37
Cumberland .....	2 92	4 37
Monmouth .....	2 56	2 92
Increase, 39 per cent.		

## AVERAGE WAGES—Concluded.

## UNITED KINGDOM.

COUNTRIES AND DISTRICTS.	1830	1880
<b>WALES—</b>		
Anglesea .....	\$1 82	\$3 28
Brecon .....	1 82	3 65
Carnarvon .....	1 82	3 65
Denbigh .....	1 82	3 52
Flint, etc. ....	1 82	3 65
Increase, 95 per cent.		
<b>SCOTLAND—</b>		
Northern .....	1 97	3 96
Middle .....	2 37	3 96
Southern .....	2 28	4 19
Increase, 83 per cent.		
<b>IRELAND—</b>		
Ulster .....	1 23	1 94
Connaught .....	91	1 94
Leinster .....	1 14	1 94
Munster .....	97	1 94
Increase, 82 per cent.		

Wages average 2 cents more in Wales, 51 cents more in Scotland, and 1.59 per week less in Ireland than in England.

## AGRICULTURAL—

Wages average in England, per week .....	\$3 53
" " " Wales, " " .....	3 55
" " " Scotland, " " .....	4 04
" " " Ireland, " " .....	1 94

### WAGES OF UNSKILLED LABOR.

Table showing the wages of unskilled (non-agricultural) labor in various parts of the United Kingdom, according to Mr. Giffen. Also a comparative table of wages in the United States, taken from Rates of Wages in this Report.

OCCUPATION.	PLACE.	United Kingdom 50 years Per week		United States 35 years Per week	
		1836	1886	1856	1891
Laborers .....	London .....	\$3 65	\$6 08	\$6 06	\$8 70
Laborers .....	Bradford .....	3 65	5 30	-----	-----
Laborers .....	Londonderry .....	1 95	3 89	-----	-----
Bricklayer's helpers .....	Manchester .....	2 92	5 35	6 18	12 30
Bricklayer's helpers .....	Glasgow .....	2 19	4 38	-----	-----
Spademen .....	Manchester .....	3 65	5 35	5 50	7 50
Stocking makers .....	Leicester .....	2 01	3 40	-----	-----
FOR YEARS		1833	1883		
Carpenters .....	Manchester .....	\$5 84	\$8 27	\$9 30	\$15 66
Carpenters .....	Glasgow .....	3 41	6 32	-----	-----
Bricklayers .....	Manchester .....	5 84	8 76	10 68	21 96
Bricklayers .....	Glasgow .....	3 65	6 56	-----	-----
Masons .....	Manchester .....	5 84	7 25	11 76	21 00
Masons .....	Glasgow .....	3 41	5 75	-----	-----
Miners .....	Staffordshire .....	3 90	5 88	8 28	11 64
Male Spinners .....	Huddersfield .....	6 20	7 30	5 46	7 50
Weavers .....	Huddersfield .....	2 92	6 32	4 08	5 52
Weavers (men) .....	Bradford .....	2 01	5 00	3 60	7 62
Spinners (children) .....	.....	1 07	2 80	4 08	5 52

Average Increase 60 per cent. 67 per cent.

## Smelter and Mine Wages.

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Supplemental to that found on page 47.

Seven other smelters, estimated and reporting since the figures found on page 47 were received, give an aggregate of 1,026 employes. Wages for ten months, \$766,859; or estimating for twelve months, \$920,231. About 800 men find employment in handling ore in the mining districts and about concentration works, and the various processes for gold extraction, who have earned about \$400,000 during the past ten months, or \$480,000 for the year ending December 31, 1894; making a total of 3,419 men employed in smelting and kindred industries, whom, it is estimated, have earned in ten months, \$2,317,633; or \$2,781,159 for the year. It is also estimated that 10,000 miners are employed about two-fifths full time, in metalliferous mines, whose earnings averaged \$300 per annum—i. e., \$2,500,000 for ten months; or \$3,000,000 for the year; giving as a total, 13,419 men employed in mining, smelting and allied occupations in this state, with earnings for ten months, \$4,817,633; or, for the year ending December 31, 1894, \$5,781,159.

## Strikes and Labor Troubles in Colorado.

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February 1, 1893. Rico miners strike against a reduction of wages.

March 15. Rockvale—Forty coal boys struck because they were not paid on the 15th; payment made on the 17th; work resumed on the 21st.

April 7. Threatened strike on the Union Pacific Railroad on account reduction of working hours; committee appointed to confer with railway manager at Omaha; settled amicably.

March 22. Strike at Creede; New York and Chance mines on account of the employment of four non-union men, who were afterwards driven out of camp by union miners and peace restored.

May 13. Strike at Overland Cotton Mills, Denver, against a 66-hour week. Settled by advancing wages 4.5 per cent. to compensate for overtime.

July 16. Strike of Denver & Rio Grand Railway switchmen at Pueblo, on account of alleged mistreatment by yardmaster. Sympathetic strike of Denver & Rio Grande switchmen at Denver. Went back to work on the 17th. Forty switchmen discharged at Pueblo, 21 of whom were reinstated afterwards; yardmaster retained.

August 22. Strike of 100 city ditch diggers, under Contractor Hindry, against a reduction of 30 cents per day; compromised.



October 23. Strike of coal miners at New Castle, Vulcan mine, for past due pay and increase of wages in special work; and strike at Consolidated mine against a reduction; compromised.

November 1. Strike at Lafayette, at United Coal Company's mine, against pay checks payable at the town stores, storekeepers refusing to cash them. Money sent November 2 to pay the men.

October 11. Strike, Carpenter's Coal mine, Mesa county, for increase of wages. Started up November 1 with new men.

October 7. Strike at Mount Lincoln Coal mine, Mesa county, for an advance of 25 cents per day; got it same day. Strike same place of drivers and putters for advance of 50 cents per diem; succeeded after two days.

November 21. Strike of Consolidated Electric Company's employes, Denver, against a reduction of wages; unsuccessful, a large number of men returning to work a short time afterwards.

January 20, 1894. The trouble in Cripple Creek mining district. Prior to February 1, 1894, forty mines and prospects were working under the eight-hour schedule, and nine mines under the nine-hour agreement. The wages were three dollars per day. About January 20, 1894, notices were posted at five of the leading and best-paying mines, owned mostly by foreign capitalists, that on and after February 1, nine hours would constitute a day's work. The Miners' Union refused to permit an extension of the nine-hour schedule. Arrangements were made by leading people of the section for a conference between the miners and mine owners. The representatives of the miners were the only parties to put in an appearance at the appointed place at the time agreed upon. On February 1 no men were found willing to go to work on the nine-hour schedule. The mines were closed. No reason was given by the mine owners other than that the mines were theirs, to do with as they saw fit.

In March another effort was made to arbitrate the difficulty, and the ultimatum offered by the mine owners at this conference was eight hours, at two dollars and seventy-five cents per day, which was rejected by the miners at a mass meeting held at Altman for the consideration of the offer. During all this controversy, more than two-thirds of the mines continued working on the eight-hour schedule, and no breach of the peace had occurred, on account of the mines that were shut down. But about this time the sheriff of El Paso county caused notices to be posted, stating that if the miners interfered with men working nine hours they would be in contempt of court. Deputy sheriffs were sent to guard some of the mines

A collision, in which a deputy was wounded occurred on March 16 between the deputies and the town officers of Altman, who were also miners. The sheriff demanded military assistance from the governor, and before noon on the 17th troops were en route for the mining district with orders to protect property rights, and prevent wanton injury." The sheriff, having after some delay, secured warrants for the arrest of some of the miners, who upon being notified, voluntarily surrendered themselves and seventeen of their number were taken to Colorado Springs, where one of them was tried and acquitted and the rest dismissed.

During the months of April and May a sort of armed neutrality existed; military discipline was enforced around Bull hill, but few acts of violence were perpetrated, although some of the owners of the smaller mines, together with some of the merchants and "men about town," left the camps, stating they had been ordered away on account of their supposed hostility to the acts of the Miners' union.

The sheriff, all this time, was engaged in recruiting an army throughout the state for the stated purpose of taking possession of some of the mines

in the territory held by the miners, and of placing guards over them so that they might be operated by non-union miners on such terms as might be offered by their owners. These troops were being massed about Colorado Springs with the ultimate intention of advancing upon Bull hill via the Midland railway and Divide station. About May 20 a contingent of the sheriff's army recruited in Denver, numbering about 200 men, were sent via Colorado Springs, Pueblo and Florence, thence over the partially completed Florence & Cripple Creek railway, to a point near Victor. A night attack was made by the miners upon the advance guard of this detachment, resulting in a slight skirmish in which two men were killed. The detachment fell back several miles and the main body occupied the train of cars in which they had been transported until they received orders to rejoin the main body at Colorado Springs. After the above mentioned skirmish the miners attacked and captured the Strong mine, which was guarded by a squad of deputies, who were captured and their arms and ammunition confiscated. Some of the hot heads among the miners, not content with this bloodless victory, injured their cause and the Miners' union by a wanton destruction of the shaft-house and machinery of the Strong mine.

Immediately after the events last recorded, the governor of the state was, through the courtesy of the management of the Denver & Rio Grande railway, given a special train by which he was enabled to present himself unannounced to the miners at Bull hill. A meeting was held on the evening of May 28, at the town of Altman, where the governor, after much opposition, was duly authorized to act as arbitrator on behalf of the miners.

Returning to Colorado Springs after being delayed some days by "washouts," he met by appointment, Mr. J. J. Hagerman, the chosen representative of the principle mine owners at 2 p. m. June 2. After a conference of six hours duration they failed

to agree upon a basis for settlement, upon the question of recommending immunity to the miners from arrest.

The governor, departing from Colorado Springs, arrived in Denver early in the morning of June 3, and before noon of that day, with the assistance of President Jeffrey, of the Denver & Rio Grande railway, another conference was arranged and by midnight terms of agreement had been signed by J. J. Hagerman and D. H. Moffat, who represented the most important mines in the Cripple Creek mining district, on behalf of the mine owners, and the governor, for the miners; under which the schedule was fixed at \$3 for eight hours work. No discrimination against union or non-union miners, and Messrs. Moffat and Hagerman to urge the other mine owners to accede to these terms.

During this time a forward advance from Divide station was in progress by the forces under Sheriff Bowers and a collision of the 1,100 deputies with the pickets of the miners was hourly expected. To prevent the anticipated contest the militia were again ordered to the mining district, where they arrived June 7, and at once took up their position between the opposing forces.

Both sides were called upon to lay down their arms; the miners did so, but the deputies, after an abortive attempt to surreptitiously flank the militia and attack the miners, sullenly retired to the town of Cripple Creek, where they again, it is said, in defiance of the authority of the sheriff, attempted an attack upon the miners which was again frustrated by the militia.

After the arrival of the militia, and up to the present time, about sixty miners have been arrested. Over forty are out on bail, but none of them have been brought to trial; a few are still in jail.

The militia remained encamped in the district for over a month, until the armed force of the sheriff was largely disbanded and dispersed. At present writing, business has been fully resumed in the district, and more miners are now employed than ever before.

February 3, 1894. Denver, Colo. Lockout of cigar makers in the factories of the Solis Cigar Co., Silver State Cigar Co. and Fritz Thies cigar factory; the three largest factories in the state, on account of a proposed reduction of wages of \$2 per 1,000, which was refused by the Cigar Makers' union. The difficulty was settled by compromise, the union accepting a reduction of \$1 per thousand.

June, 1894. General strike for increased wages and against company stores was inaugurated at nearly all the coal mines in the state. Some demonstrations to show their number, but no acts of violence were committed by the miners. The strikers failed to achieve what they sought, and early in the fall began gradually to return to work.

June 25, 1894. Sympathetic strike on all the railroads, with the great Pullman strike at Chicago; United States court deputies sworn in at Denver and sent to various points in the state to protect railway property now in the hands of the United States courts.

On the fourth day of July, Marshal Israel issued the following orders to his deputies on duty: "Allow no talk on company property tending to cause trouble, arrest parties who engage in talk, whether off or on company property, which it intended to intimidate employes or to induce them to quit receivers' employment, or to incite any parties to violate injunction, to interfere with trains or to damage property. Conspiracies or combinations, if they can be clearly established, should also be treated as violations of the injunction. Of course, violating any portion of injunction, and especially violence, should

cause immediate arrest. No warrants are necessary for arrest of any parties violating injunction whether on company property or elsewhere. Pay no attention to local officers or magistrates. If they interfere with you, arrest them. Interference with you will not be tolerated. \* \* \* All men in the service of receivers' roads, who since Saturday have refused to work without having given due notice to the heads of their departments, are to be arrested."

With regard to the character of the men to whom these responsible duties were assigned, Marshal Israel is reported to have said: "I have been forced to pick up all kinds of men so far, but since I have seen what kind of men some of them are, I am going to be more careful hereafter and I will engage only men who will fight; I don't care whether they are horse thieves, hoboos or thugs, just so they will fight when it is necessary."

To the instructions to United States deputy marshals, the governor of this state entered a formal protest, as follows:

To Hon. Moses Hallett, United States Judge, Denver, Colo.:

Sir—I beg leave to call your attention to the instructions just issued by United States Marshal Israel to his deputies at La Junta, Trinidad and other points in the state. These instructions were published this morning in the Denver daily papers and I am informed at the office of the United States marshal that they were probably correctly given. If these instructions are issued with your knowledge, or if they are warranted by an order of the United States issued out of your court, I most respectfully inquire by what authority either you as district judge or United States Marshal Israel, disregard the clause of the United States Constitution in relation to arrests without due process of law or by directing the deputy marshals to pay no attention to local officers or magistrates, practically suspending the writ of habeas corpus and threaten judges of

state courts and sheriffs with arbitrary arrest without process, for discharging what may be their sworn duties? \* \* \* Permit me to say that the most dangerous anarchy in the state of Colorado has been that of the United States court in Denver, which has allowed the United States marshal to enlist a private army to suppress alleged state troubles of which neither the county or state authorities had any notice, and has called into active service United States troops without the request of or notice to the governor of the state, and is waging actual war in Colorado without any declaration thereof by the United States or notice or knowledge thereof by the state authorities and in utter violation of law.

When it was deemed necessary to call out the military force, the state administration called out the National guard, the regular citizen soldiery, whose loyalty to law and order cannot be questioned. In strong contrast with this action of the state administration is the conduct of the United States marshal acting under the immediate supervision of the United States Circuit court at Denver.

As governor of the state of Colorado, I enter my most vigorous protest against this invasion of the sovereign rights of the people of this state by the United States court at Denver and its marshal.

Very respectfully yours,

(Signed.)

DAVIS H. WAITE,

Governor of Colorado.

In addition to the foregoing protest the governor sent a telegram to the president of the United States, protesting against the instructions of Marshal Israel to his deputies, and asking by what authority the marshal had violated the constitution as to arrest and usurp the authority of the president to suspend the writ of habeas corpus.

No acts of violence were perpetrated in the state by the strikers save at La Junta and Trinidad, where some deputies and railroad men were roughly handled by mobs, largely composed of sympathizers of

the strikers. Numerous arrests were made all along the lines, of both innocent and guilty parties, who were denied a hearing near their homes and were hurried to Denver where they were thrown into jail and kept for a long time until their cases could be heard in the United States courts, where only a few of the many arrested were found guilty of any infringement of the law.

Reports of repeated insults to unoffending citizens by United States deputies were of daily appearance in the local papers of Pueblo and other towns in the southern part of the state. At Pueblo, a brutal murder was committed by a deputy on one of the principal streets of the city. On the ninth day of July, a committee of employees of the Denver & Rio Grande Railway voluntarily offered their services to President Jeffrey to go out and talk with the men along the line and attempt to induce them to return to work. As the road was not at that time much involved in the strike and as the management had pursued a conservative policy regarding the strikers, they were persuaded to return to work, and the road was soon thereafter running all their trains with usual regularity.

On the 8th day of August the local American Railway Unions of Denver, formally declared the strike off, but before that date all the roads had gradually resumed operations, mainly with new men. In so far as directly securing justice for the Pullman strikers, the strike was a disastrous failure; but it has aroused the country to a realizing sense of the dangerous condition to which corporate and irresponsible powers conferred by law have reduced the country.

If the outcome should be the enactment of laws clearly defining the mutual obligations of corporations and their employees when engaged in public service upon the faithful, steady and expeditious performance of which the public may be dependent and



must suffer if neglected, then the loss of life and property incident to the strike, will not have been in vain.

Since the strike, many of the railway employes of Colorado have been obliged to leave the state in order to secure employment where their connection with the trouble was unknown; but, in numerous instances their records have preceeded them or followed swiftly after them. They have been met with a stare of recognition, a blunt refusal and the intimation that although men were wanted, they could not be given employment. Others who had been employed, were soon thereafter discharged without stated cause and refused "clearance cards" without reason.

The Rocky Mountain News, of Denver, sent a reporter to investigate the alleged condition of some hundreds of unemployed railway men residing in that city, and from the published statements of the men and their wives, there can be no doubt that, as the report of the Chicago strike commission says of Chicago, a like concerted effort has been inaugurated in this state. The report says: "The association (i. e. the general managers' association) charged the American Railway Union with having inaugurated an unjustifiable strike, laid at its door the responsibility for all the disorders and destruction that had occurred, and, as the victors in the fight, desired that the lesson taught to labor by its defeat should be well learned." But I submit for the consideration of the railway management of this state, that if "the lesson taught to labor" is to be of any benefit to the strikers and their impoverished families, the punishment ought to terminate somewhere short of the death of the object of their vengeance.

The following conclusions and recommendations of the Chicago strike commission are herewith respectfully submitted for the information of our legislators, as in the opinion of this bureau being a wise, well considered and practical plan of a com-

mittee fully competent for the duties with which they were intrusted, whose recommendations ought to furnish the basis for remedial legislation at the hands of the representatives of the people:

## Chicago Strike.

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### CONCLUSIONS AND RECOMMENDATIONS.

The commission has tried to find the drift of public opinion as to strikes, boycotts and labor disputes upon railroads, and to find their remedy. The invitation freely extended in this direction has brought before the commission many expressions of views, orally and by written communications. A condensation of these latter is presented with this report. In reaching its conclusions the commission has endeavored, after careful consideration, to give due weight to the many suggestions and arguments presented. It is encouraging to find general concurrence, even among labor leaders, in condemning strikes, boycotts and lockouts as barbarisms unfit for the intelligence of this age, and as, economically considered, very injurious and destructive forces. Whether won or lost is broadly immaterial. They are war—internecine war—and call for progress to a higher plane of education and intelligence in adjusting the relations of capital and labor. These barbarisms waste the products of both capital and labor, defy law and order, disturb society, intimidate capital, convert industrial paths where there ought to be plenty into highways of poverty and crime, bear as their fruit the arrogant flush of victory and the humiliating sting of defeat, and lead to prepa-

tions for greater and more destructive conflicts. Since nations have grown to the wisdom of avoiding disputes by conciliation, and even of settling them by arbitration, why should capital and labor in their dependence upon each other persist in cutting each other's throats as a settlement of differences? Official reports show that much progress has been made in the more sane direction of conciliation and arbitration even in America. Abroad they are in advance of us in this policy. Were our population as dense and opportunities as limited as abroad, present industrial conditions would keep us much more disturbed than we now are by contests between capital and labor.

In England, prior to 1824, it was conspiracy and felony for labor to unite for purposes now regarded there by all classes as desirable for the safety of the government, of capital and for the protection of the rights of labor. All industrial labor is there, as a rule, covered by unions trained to greater conservatism through many disastrous conflicts under harsh conditions and surroundings. Capital abroad prefers to deal with these unions rather than with individuals or mobs, and from their joint efforts in good faith at conciliation and arbitration much good and many peaceful days have resulted. In fifteen of our states arbitration in various forms is now provided by law; the United States and eleven states have sanctioned labor organizations by statute. Some of our courts, however, are still poring over the law reports of antiquity in order to construe conspiracy out of labor unions. We also have employers who obstruct progress by perverting and misapplying the law of supply and demand, and who, while insisting upon individualism for workmen, demand that they shall be let alone to combine as they please and that society and all its forces shall protect them in their resulting contentions.

The general sentiment of employers, shared in by some of the most prominent railroad representa-

tives we have heard, is now favorable to organization among employees. It results in a clearer presentation and calmer discussion of differences, instills mutual respect and forbearance, brings out the essentials, and eliminates misunderstandings and immaterial matters. To an ordinary observer, argument to sustain the justice and necessity of labor unions and unity of action by laborers is superfluous.

The rapid concentration of power and wealth, under stimulating legislative conditions, in persons, corporations, and monopolies has greatly changed the business and industrial situation. Our railroads were chartered upon the theory that their competition would amply protect shippers as to rates, etc., and employes as to wages and other conditions. Combination has largely destroyed this theory, and has seriously disturbed the natural working of the laws of supply and demand, which, in theory, are based upon competition for labor between those who "demand" it as well as among those who supply it. The interstate commerce act and railroad-commission legislation in over thirty states are simply efforts of the people to free themselves from the results of this destruction of competition by combination. Labor is likewise affected by this progressive combination. While competition among railroad employers of labor is gradually disappearing, competition among those who supply labor goes on with increasing severity. For instance, as we have shown, there is no longer any competitive demand among the twenty-four railroads at Chicago for switchmen. They have ceased competing with each other; they are no longer twenty-four separate and competing employers; they are virtually one. To be sure, this combination has not covered the whole field of labor supply as yet, but it is constantly advancing in that direction. Competition for switchmen's labor still continues with outside employers, among whom, again, we find a like tendency to eliminate competitive demand for labor by similar combination. In

view of this progressive perversion of the laws of supply and demand by capital and changed conditions, no man can well deny the right nor dispute the wisdom of unity for legislative and protective purposes among those who supply labor.

However men may differ about the propriety and legality of labor unions, we must all recognize the fact that we have them with us to stay and to grow more numerous and powerful. Is it not wise to fully recognize them by law; to admit their necessity as labor guides and protectors, to conserve their usefulness, increase their responsibility, and to prevent their follies and aggressions by conferring upon them the privileges enjoyed by corporations, with like proper restrictions and regulations? The growth of corporate power and wealth has been the marvel of the past fifty years. Corporations have undoubtedly benefited the country and brought its resources to our doors. It will not be surprising if the marvel of the next fifty years be the advancement of labor to a position of like power and responsibility. We have heretofore encouraged the one and comparatively neglected the other. Does not wisdom demand that each be encouraged to prosper legitimately and to grow into harmonious relations of equal standing and responsibility before the law? This involves nothing hostile to the true interests and rights of either.

A broad range of remedies is presented to the commission as to the best means of adjusting these controversies, such as government control or ownership of railroads; compulsory arbitration; licensing of employes; the single-tax theory; restriction of immigration and exclusion of pauper labor; protection of American industries; monetary legislation; suppression of trusts and combinations; written contracts requiring due notice of discharge by employers and of leaving service by employes; United States labor commission to investigate and

fix hours of labor, rates of wages, etc.; a fixed labor unit; authority to courts to settle these questions; insurance departments and pensioning of employes; fixing hours of labor and minimum rates of wages by statute; change in law of liability of master to servant; and various suggestions for relief, outside of any legislative action, through educational methods tending to the inculcation of mutual forbearance and just consideration of each other's rights in the premises.

The commission deems recommendations of specific remedies premature. Such a problem, for instance, as universal government ownership of railroads is too vast, many-sided, and far away, if attempted, to be considered as an immediate, practical remedy. It belongs to the scholastic group of public questions where government ownership is advocated of monopolies, such as telegraphs, telephones, express companies, and municipal ownership of waterworks, gas and electric lighting, and street railways. These questions are pressing more urgently as time goes on. They need to be well studied and considered in every aspect by all citizens. Should continued combinations and consolidations result in half a dozen or less ownerships of our railroads within a few years, as is by no means unlikely, the question of government ownership will be forced to the front, and we need to be ready to dispose of it intelligently. As combination goes on there will certainly at least have to be greater government regulation and control of quasi-public corporations than we have now.

Whenever a nation or a state finds itself in such relation to a railroad that its investments therein must be either lost or protected by ownership, would it not be wise that the road be taken and the experiment be tried as an object lesson in government ownership? The Massachusetts Railroad Commission, which is noted for its eminent services as a

conservative pioneer in the direction of government control of railroads through the force of public opinion, for several years urged that the experiment of state ownership be tried with the Fitchburg system, because of the large state investment in the Hoosac tunnel. We need to fear everything revolutionary and wrong, but we need fear nothing that any nation can successfully attempt in directions made necessary by changed economic or industrial conditions. Other nations under their conditions own and operate telegraphs and railroads with varying results. Whether it is practicable for this nation to do so successfully when it becomes necessary to save an investment, or when the people determine it shall be done, is an open and serious question which can not be answered fully except by actual experiment.

We ought now to inaugurate a permanent system of investigation into the relations between railroads and employees in order to prepare to deal with them intelligently, and that we may conservatively adopt such remedies as are sustained by public opinion for defects or wrongs that may from time to time appear. In the long contest between shippers and railroads penal and specific legislation proved inadequate. The lessons of this period of legislation need to be well remembered by labor. Hasty, revengeful, and retaliatory legislation injures every interest, benefits nobody, and can not long be enforced.

The question of the right of Congress to legislate in regard to the conditions of employment and service upon railroads engaged in interstate commerce is a most important one, and the right seems by analogy to exist. Similar power as to rates, discriminations, poolings, etc., has been exercised in the act to regulate commerce, and has been sustained by the courts. The position of railroads as quasi-public corporations subjects them and their employees to this power, and imposes its exercise upon Congress



as a duty, whenever necessary for the protection of the people. The question of what shall be done is therefore one of expediency and not of power. When railroads acted as judge and jury in passing upon the complaints of shippers, the people demanded and Congress granted a government tribunal where shippers and railroads could meet on equal terms and have the law adjust their differences. In view of the Chicago strike and its suggested dangers, the people have the same right to provide a government commission to investigate and report upon differences between railroads and their employes, to the end that interstate commerce and public order may be less disturbed by strikes and boycotts. Public opinion, enlightened by the hearings before such a commission, will do much toward settling many difficulties without strikes, and in strikes will intelligently sustain the side of right and justice and often compel reasonable adjustments. Experience however, has taught that public opinion is not alone powerful enough to control railroads. Hence power to review and enforce the just and lawful decisions of the commission against railroads ought to be vested in the United States courts. There can be no valid objection to this when we bear in mind that we are now dealing simply with quasi public corporations and not with either individuals or private corporations. What is safe and proper as to the former might be unsafe and unjust for the latter. That which is done under the act to regulate commerce as to rates can safely and ought properly to be done as to railroad wages, etc., by a commission and the courts.

Some stability and time for conciliation and amicable adjustment of disputes can also be secured by providing that labor unions shall not strike pending hearings which they seek; and that railroads shall not discharge men except for cause during hearings, and for a reasonable time thereafter. A provision may well be added requiring employes dur-

ing the same period to give thirty days' notice of quitting and forbidding their unions from ordering or advising otherwise.

Many assert with force that no law can be justly devised to compel employers and employes to accept the decisions of tribunals in wage disputes. It is insisted that while the employer can readily be made to pay under an arbitration decision more than is or than he thinks is right, the employe can not practically be made to work. He can quit, or at least force his discharge, when the decision gives him less than he demands. Hence nothing reciprocal can be devised, and without that element it is urged that nothing just can be enacted of a compulsory nature. This may be true in general industries, but it has less weight as between railroads and their labor. Railroads have not the inherent rights of employers engaged in private business; they are creatures of the state, whose rights are conferred upon them for public purposes, and, hence, the right and duty of government to compel them to do in every respect what public interest demands are clear and free from embarrassment. It is certainly for the public interest that railroads shall not abandon transportation because of labor disputes, and, therefore, it is the duty of the government to have them accept the decision of its tribunals, even though complete reciprocal obligations can not be imposed upon labor. The absence of such reciprocal obligations would rarely affect railroads unjustly, if we regard the question in a practical light.

Railroad employment is attractive and is sought for. There has never been a time in the history of railroads when men did not stand ready to fill a labor vacancy at the wages fixed by the roads. The number is constantly increasing. If railroads can thus always get the men that they need at what they offer, is there any doubt that the supply will be ample at any rates fixed by a commission and the courts? A provision as to notice of quitting, after

a decision, would be ample to enable railroads to fill vacancies caused in their labor departments by dissatisfaction with decisions. To go further, under present conditions, at least, in coercing employes to obey tribunals in selling their labor would be a dangerous encroachment upon the inherent, inalienable right to work or quit, as they please.

When railroad employes secure greater certainty of their positions and of the right to promotion, compensation for injury, etc., it will be time enough to consider such strict regulation for them as we can now justly apply to railroads, whose rights are protected by laws and guarded by all the advantages of greater resources and more concentrated control.

In solving these questions, corporations seldom aid the efforts of the people or their legislators. Fear of change and the threatened loss of some power invariably make them obstructionists. They do not desire to be dealt with by any legislation; they simply want to be let alone, confident in their ability to protect themselves. Whatever is right to be done by statutes must be done by the people for their own protection, and to meet the just demand that railroad labor shall have public and impartial hearing of all grievances.

The commission does not pretend to present a specific solution of these questions. Its effort is simply to present the facts; to point out that the relations of capital and labor are so disturbed as to urgently demand the attention of all thinking and patriotic citizens; to suggest a line of search for practical remedial legislation, which may be followed with safety, and, finally, to urge and invite labor and railroads to hearty co-operation with the government and the people in efforts to substitute law and reason in labor disputes for the dangers, sufferings, uncertainties and wide-spread calamities incident to strikes, boycotts and lockouts.

To secure prompt and efficient data for the formation of correct public sentiment in accordance

with this line of thought, the commission contends that law should make it obligatory upon some public tribunal promptly to intervene by means of investigation and conciliation and to report whenever a difficulty of the character of that occurring during the past season at Chicago arises. This intervention should be provided for, first, when the tribunal is called upon to interfere by both of the parties involved; second, when called upon by either of the parties, and, third, when in its own judgment it sees fit to intervene. The proper tribunal should have the right in other words, to set itself in motion, and rapidly, too, whenever in its judgment the public is sustaining serious inconvenience. If the public can only be educated out of the belief that force is and must always remain the basis of the settlement of every industrial controversy, the problem becomes simplified. A tribunal, however, should not intervene in mere quarrels between employer and employed, unless the public peace or convenience is involved; but where it is a clear case of public obstruction, whether caused by individuals or by a corporation, a tribunal should not wait until called on by outside agencies to act. All parties concerned should be notified that the tribunal proposes, upon a certain day—and the earlier the day the better—to be at a given place, there to look into the cause of the trouble, to adjust the difficulties by conciliation, if possible, and, in the event of a failure, to fix the responsibility for the same. Proceeding in this way the report of such a commission would cause public opinion promptly to settle the question, or, at least, to fix the responsibility where it belonged, and to render successful opposition to the conclusions reached an improbability. To carry out this idea involves no complicated legislation.

As authorized by statute, the commission has decided upon certain recommendations and certain suggestions, growing out of its study of the Chicago strike and boycott. These recommendations and sug-

gestions are upon three lines: First, for Congressional action; second, for state action; and third, for the action of corporations and labor organizations. It readily sees the impropriety to a certain extent of making any recommendations for state action, yet feels it a duty, as a result of its investigations, to make such suggestions as will enable citizens interested in state legislation to benefit by its experience, and also to make such suggestions to corporations and labor organizations as shall tend to harmonize some of the existing difficulties. The commission therefore recommends:

I.

(1.) That there be a permanent United States strike commission of three members, with duties and powers of investigation and recommendation as to disputes between railroads and their employes similar to those vested in the interstate commerce commission as to rates, etc.

a. That, as in the interstate commerce act, power be given to the United States courts to compel railroads to obey the decisions of the commission, after summary hearing, unattended by technicalities, and that no delays in obeying the decisions of the commission be allowed pending appeals.

b. That, whenever the parties to a controversy in a matter within the jurisdiction of the commission are one or more railroads upon one side and one or more national trades unions, incorporated under chapter 567 of the United States statutes of 1885-1886, or under state statutes, upon the other, each side shall have the right to select a representative, who shall be appointed by the president to serve as a temporary member of the commission in hearing, adjusting and determining that particular controversy.

(This provision would make it for the interest of labor organizations to incorporate under the law and

to make the commission a practical board of conciliation. It would also tend to create confidence in the commission and to give to that body in every hearing, the benefit of practical knowledge of the situation upon both sides.)

c. That, during the pendency of a proceeding before the commission inaugurated by national trade unions, or by an incorporation of employes, it shall not be lawful for the railroads to discharge employes belonging thereto except for inefficiency, violation of law, or neglect of duty; nor for such unions or incorporation during such pendency to order, unite in, aid, or abet strikes or boycotts against the railroads complained of; nor, for a period of six months after a decision, for such railroads to discharge any such employes in whose places others shall be employed, except for the causes aforesaid; nor for any such employes, during a like period, to quit the service without giving thirty days' written notice of intention to do so, nor for any such union or incorporation to order, counsel, or advise otherwise.

2. That chapter 567 of the United States Statutes of 1885-86 be amended so as to require national trades unions to provide in their articles of incorporation, and in their constitutions, rules, and by-laws that a member shall cease to be such and forfeit all rights and privileges conferred on him by law as such by participating in or by instigating force or violence against persons or property during strikes or boycotts, or by seeking to prevent others from working through violence, threats, or intimidations; also, that members shall be no more personally liable for corporate acts than are stockholders in corporations.

3. The commission does not feel warranted, with the study it has been able to give to the subject, to recommend positively the establishment of a license system by which all the higher employes or others of railroads engaged in interstate commerce should be licensed after due and proper examination,

but it would recommend, and most urgently, that this subject be carefully and fully considered by the proper committee of Congress. Many railroad employes and some railroad officials examined and many others who have filed their suggestions in writing with the commission are in favor of some such system. It involves too many complications, however, for the commission to decide upon the exact plan, if any, which should be adopted.

## II.

1. The commission would suggest the consideration by the states of the adoption of some system of conciliation and arbitration like that, for instance, in use in the commonwealth of Massachusetts. That system might be re-enforced by additional provisions giving the board of arbitration more power to investigate all strikes, whether requested so to do or not, and the question might be considered as to giving labor organizations a standing before the law, as heretofore suggested for national trade unions.

2. Contracts requiring men to agree not to join labor organizations or to leave them, as conditions of employment, should be made illegal, as is already done in some of our states.

## III.

1. The commission urges employers to recognize labor organizations; that such organizations be dealt with through representatives, with special reference to conciliation and arbitration when difficulties are threatened or arise. It is satisfied that employers should come in closer touch with labor and should recognize that, while the interests of labor and capital are not identical, they are reciprocal.

2. The commission is satisfied that if employers everywhere will endeavor to act in concert with labor; that if when wages can be raised under econom-

ic conditions they be raised voluntarily, and that if when there are reductions reasons be given for the reduction, much friction can be avoided. It is also satisfied that if employers will consider employes as thoroughly essential to industrial success as capital, and thus take labor into consultation at proper times, much of the severity of strikes can be tempered and their number reduced.



## PART II.

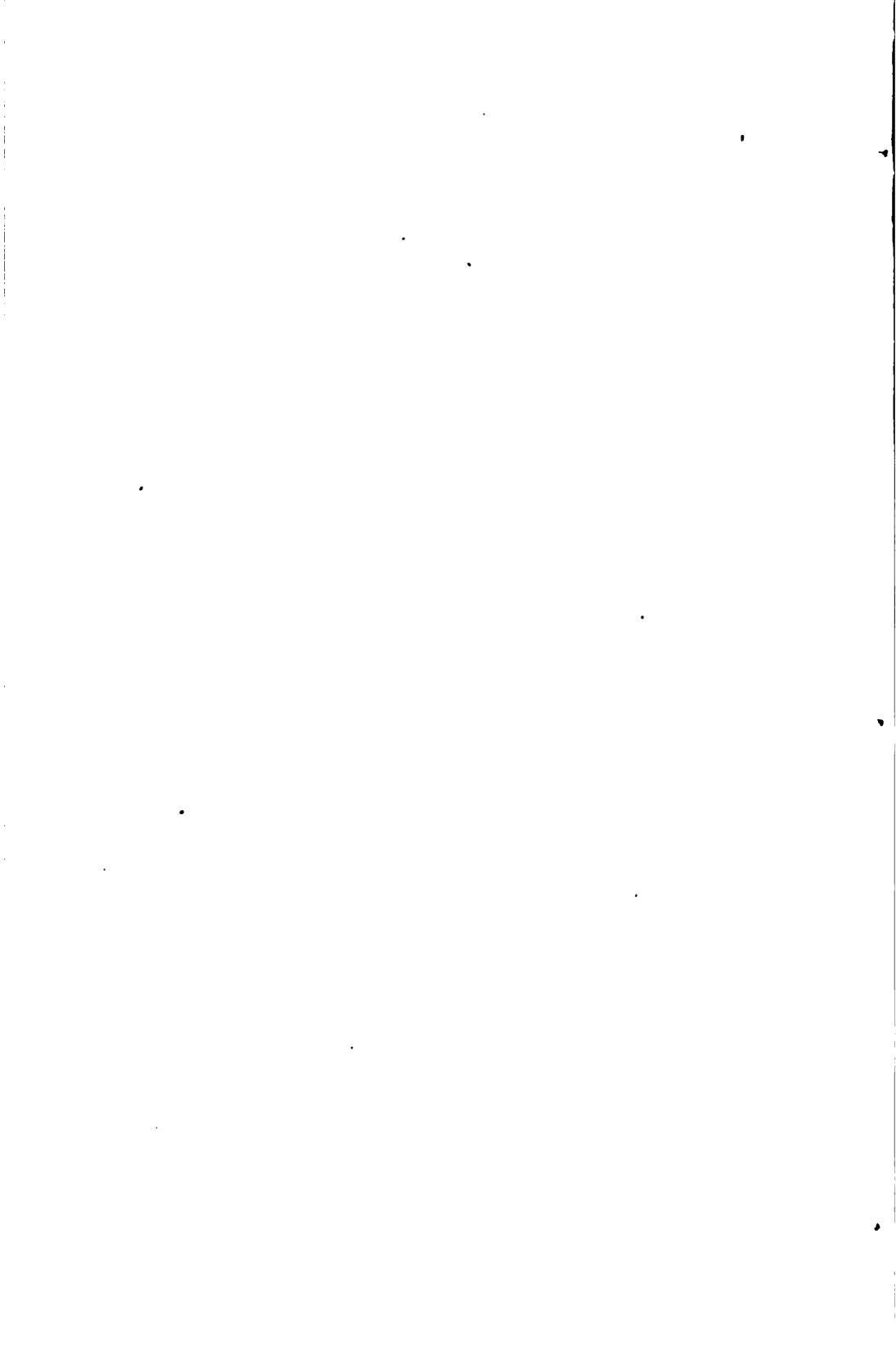
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### *LABOR COMMISSIONERS' REPORTS AND WHAT THEY CONTAIN.*

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GERMAN METHOD OF DEALING WITH THE TRAMP QUESTION.  
ROYALTIES—WHAT THEY ARE.

SUBJECTS FOR INVESTIGATION FOR 1894—RANGE OF OFFICIAL  
DUTIES AND THE APPROPRIATIONS MADE FOR CARRYING  
THEM OUT.



## Labor Commissioners' Reports and What They Contain.

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### MISSOURI.

The labor commissioner of this state, Henry Blackmore, begins his report with a very interesting chapter on "Tendencies." I quote the following:

"Accurate information cannot be too widely disseminated amongst a people upon whom rest the tremendous dual responsibility of providing for themselves in a conflict which grows fiercer in proportion to numbers; grappling with economic and social problems divergent and conflicting, which must be passed upon at recurring intervals. The verdict so rendered is instruction to those commissioned to crystalize in legislative enactments the will of the majority.

"A government by the people is not only the freest and happiest, but it is the most stable, so long as equal rights are not impinged. No lot is too hard, no burden too great, to be cheerfully borne by the masses, if they believe that it is the natural result of natural conditions. If a man believes that lack of inherited ability, want of opportunity, or other like reasons consign him to work for a dollar a day, while another gets one hundred dollars in the same time—because so few can do the work to command that pay—he accepts the situation as the arrangement of God, beyond the control of human effort. But if he con-

cludes that the gulf of disparity has been widened and deepened by insidious laws, that protect and build up one class; if he thinks conditions are partially the result of legislation in the interest of the rapacious, the cunning, the unscrupulous, he is no longer content. He refuses to accept the situation with meekness, and begins the formulation of new ideas to be propagated. If he should happen to be an Adam Smith, the greatest original thought on economy at the time would result, overthrowing false theories, opening up new fields, giving impetus to commerce, and vitalizing trade in all its ramifications, which in turn gives employment to the idle, increases wages, builds homes, brings comfort and independence. If Herr Most, then the leveling ideas of the commune, with its red flag, the tragedy of Haymarket—a faint suggestion of what anarchy might be run riot."

Again, page 10, he says:

"The problem of to-day is the unsolved problem of the ages. In all other respects we have improved and advanced. The question with us is not the poverty of the poor. Speaking broadly, they are better housed, better fed, better clothed, better educated, get better pay, have more advantages and facilities here than elsewhere. The danger is not from the moderately rich, for they are necessary to the business of the country, keeping open the avenues of trade and commerce, in vitalizing energy and production. The danger, supreme and manifest, is plutocracy by the few."

Referring to wages, he remarks:

"The law of wages is, that when the supply of wage-earners is equal to development, the wage is only equal to the rate of living of the average worker. As the supply increases beyond this point, the rate of living is reduced to the narrowest margin above starvation and squalid surroundings; rent in cities increases in proportion as population increases, making it harder and harder for the wage-worker to exist

from two opposing causes of increasing intensity—the lowering of wages with the advance in rent. The land-owner, on the other hand, lives easier and easier from the increasing increment of rent, and the cheapness of the price of labor he commands. This is progress and poverty, the dire effects of which are prophesied by the ablest pessimistic thinkers of the age. ‘In allowing one man to own the land on which and from which other men must live,’ says Mr. George, ‘we have made them his bondsmen in a degree which increases as material progress goes on. This is the subtle alchemy that in ways they do not realize is extracting from the masses in every civilized country the fruits of their weary toil; that is instituting a harder and more hopeless slavery in place of that which has been destroyed; that is bringing political despotism out of political freedom, and must soon transmute democratic institutions into anarchy.’”

The Missouri legislature, in addition to making the labor commissioner state factory inspector, passed the following law, which I respectfully commend to the legislature of this state as worthy of adoption, and necessary for the best interests of our people:

“Sec. 1. It is hereby made the duty of the public authorities of each city in this state with a population of 5,000 inhabitants or more to appoint an inspector, with deputies where the same are necessary, to be paid by the cities such reasonable compensation as may be prescribed by ordinance, whose duty it shall be to make frequent inspections of all factories employing exceeding ten persons and said inspectors may perform such duties as may be prescribed by ordinance, and shall make semi-annual reports to the state labor commissioner, and shall also cause any violation of the provisions of this act to be brought to the attention of the grand juries of their respective counties. The duties by this section devolved upon an inspector may, under such regulation as may be

prescribed by ordinance, be performed by any city officer designated by ordinance of such city for the purpose."

The commissioner's report on factory inspection abounds with harrowing details of incidents regarding over-work and under-pay, similar to those reported on by the United States commission for the investigation of the sweating system in all our principal cities. His recommendations appear to be wise and practicable.

As is the case with many others, he devotes considerable space to building and loan associations. The importance of these associations, and their relations to the welfare of the producer, fully justify the attention given to the matter by labor bureaus. Mr. Carroll D. Wright, commissioner of labor of the United States, is making an exhaustive investigation of this subject in all the states, which, when published, will take the place of the results of individual state effort in that direction.

I recommend that the state superintendent of insurance shall have supervision of the building and loan associations of this state, under laws giving him like powers for investigation, and demanding statements that he now possesses regarding insurance companies.

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### MASSACHUSETTS.

Horace G. Wadlin, commissioner, transmits the seventh annual report of the statistics of manufactures for 1892. The first report in 1886 contained the statistics of 1,027 establishments. In the present report 4,473 are considered, comprising returns from the leading establishments in the principal industries of the state. The value of the goods made and the work done was \$676,621,503.

The report includes the following industries:

Cotton—187 establishments, employing 75,544 persons; value of goods made, \$100,202,882; wages paid, \$26,230,667.

Wool—365 establishments, employing 43,038 persons; value of goods made, \$72,681,408; wages paid, \$16,154,034.

Silk—20 establishments, employing 2,993 persons; value of goods made, \$5,557,569; wages paid, \$1,296,399.

Quarries and Mines—183 establishments; employees, 4,413; wages, \$2,102,220; value, \$3,364,697.

Clothing—280 establishments; employees, 9,811; wages, \$3,948,154; value, \$28,602,244.

Furniture—284 establishments; employees, 5,562; wages, \$2,820,068; value, \$12,856,202.

Machinery—648 establishments; employees, 16,627; wages, \$9,311,769; value, \$26,867,581.

Average annual wages paid in all industries, \$452.21.

Total employed, 312,146; 33 per cent. of whom were females.

Mr. Wadlin's report of labor statistics is confined to a tenement-house census of Boston, dealing with the sanitary condition of the tenements and their environments. The number of persons to each house, number of rooms without outside windows, sick in tenements and their physical condition and surroundings, occupation of residents, their sex and nationality, tendency of a large city to lapse into filthy conditions, causes of a crowded tenancy, habitual loafers, criminals and paupers, etc. The report is exhaustive and exceedingly interesting and instructive.

With regard to the tendency of a large city to lapse into filthy conditions, he writes as follows:

"A large city is constantly tending to lapse into filthy conditions, and is extremely fortunate if, in its remote and retired places, its back-yards and private

alleys, it does not find itself in a state of chronic uncleanness. The danger of lapse into unclean conditions externally is much greater, and the decadence of the tenements more rapid, when the city is subject to immigration; and especially when in certain districts the influx of population is of various nationalities, having generally low standards of living, and closely concentrated in tenements which were originally designed for very different and far less numerous occupants. This is exactly what has taken place in Boston throughout the concentrated district."

In wards six and seven the number of houses has decreased from 2,482 in 1880, to 2,217 in 1892, while the foreign-born population has increased during the same period 3,273 persons, accompanied by a decline of 1,135 in native population—thus showing an increased concentration of 2,138 undesirable people into 265 less tenements. It is also noted that in these wards the Irish population decreased 2,145 persons, while the Russian and Italian population increased 4,934 during the ten-year period above mentioned.

"Stringent sanitary regulations properly enforced and supplemented by continuous tenement inspection will go far toward improving the environment of the dwellers in the tenement house districts. These, however, are in the nature of police regulations. Take the most obvious evil that is met with—that of uncleanness. Even superficial investigation will convince any one that there are many families, especially among recent accessions, who do not regard dirt as particularly disagreeable, and who contentedly live under conditions that would be considered absolutely filthy by those on a higher social plane. As long as this spirit of contentment continues, there can be no great improvement, and only a perfunctory compliance with the simplest sanitary requirements. Left to themselves, the immigrants



who come into these districts simply reproduce here the social conditions out of which they came, and far too often they have been left largely to themselves. As long as they commit no overt act we have permitted them to live in their own way in their tenements.

"It seems to be felt that they are most dangerous on account of certain theories and beliefs which they may possibly hold. In reality they are dangerous because of their condition. To permit them to remain untouched by the refining influences of society is not only ethically wrong, but it is also economically wrong. They are not entirely responsible for the fact that they are found under such conditions, that they are wedded to class prejudices, or that they easily acquire dangerous social theories; nor are they responsible for the miserable tenements which public opinion has permitted to exist. When we cease to regard the immigrant as merely so much cheap labor, or as only an impersonal factor in production, then we shall have found the real solution of the problem.

\* \* \* To return, also, to the subject of cleanliness, when its importance is recognized it is with great difficulty that it can be secured with the present facilities. The tables show a great lack of bath-rooms in the crowded districts, and the provisions for performing the laundry work of the family are frequently very inadequate. These facilities for personal and family cleanliness are generally in inverse proportion to the concentration of the population within the tenements. The city provides free bath-houses, limited in number and rather crude in arrangement, for use during the summer months. These might be multiplied and very much improved, and should be supplemented by a system of free bath-houses for use during the cold months of the year. It would be well, also, if there might be a system of public laundries provided similar to those in use in Paris. In that city the number of public bath-houses are admirably arranged, carefully supervised by the

municipal authorities, although generally under private management; and in the public laundries which exist throughout the city, water and tubs are furnished for an insignificant fee, and upon payment of a slightly larger sum, the wringing and drying is done. Throughout the city there are stands providing hot water and filtered drinking water in fountains upon the 'press-the-button' principle. If these may be profitably maintained as a commercial enterprise, there is no reason why they might not be established and conducted by municipal authority, possibly under such slight charges as would render them self-supporting. We may profitably study these provisions for public cleanliness and comfort, and also the recent improvements projected by the London county council, which include plans for destroying the slums, an extension of the park system, especially in so-called slum districts, and other efforts in the direction of improving the social condition of the people."

No census of the unemployed of Boston has been taken since 1885. At that date there were 31,262 persons who had been unemployed for periods ranging from one to twelve months out of 169,885 engaged in remunerative occupations. Mr. Wadlin thinks this the normal number, and says if enumeration were made during October, 1893, the number would undoubtedly be found to be larger. His report of unemployment, issued in August, 1894, shows the per cent. of unemployed to have been 0.95 in September, 1892, and 22.33 in September 1893, an increase of 23.50 per cent. in the state.

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#### MICHIGAN.

Before accepting a position in the United States bureau of labor statistics, Mr. Henry A. Robinson, as commissioner of labor for the state of Michigan, had the honor of issuing the largest, as well as one of the

best, state reports issued by any other state bureau. It is a volume of 1,350 pages, divided into eleven parts, treating on immigration, sociology, building trades, mortgages and ownership of property in four cities, royalties, cost of living, farm mortgages, etc.

Mr. Robinson has the following to say regarding labor bureaus:

"The labor bureaus have been established in obedience to the demands, if not the commands, of the great laboring masses, and the results of their establishment, only just beginning to be felt, are, nevertheless, of such a beneficial character as to silence most of those who were opposed to their creation.

"That the public have begun to see the usefulness of these institutions is shown by the great demand for the publications issued by the various bureaus. The reports of the Massachusetts bureau are, and for years have been, in great demand. This is also true of most of the reports issued by the United States bureau of labor statistics, as well as those issued by some of the other departments of statistical inquiry, such as the census and agricultural. Of the demand for the reports of this bureau, it may be said, especially of the issue of 1892, that it was greatly in excess of the supply. This demand has come from all directions and from every part of the world; and, if we may be permitted to add, accompanied or followed by numerous testimonials as to the value of the reports by those who had received copies. If eight thousand of these had been printed instead of the four thousand, to which we were limited by law, there would have been no more than enough to meet the demand. Valuable public documents seldom, if ever, find their way into the waste basket."

I regret that want of space prevents further quotation from this portion of his valuable report concerning factory inspection and free public employment offices, trade unionism and profit sharing, all of which are treated in a masterly manner. His chap-

ter on immigration is so suggestive, that even at the risk of crowding out other important matters, I venture to give it entire, as follows:

### IMMIGRATION.

#### Would Its Restriction be a Benefit to the Wage Workers of Michigan?

Among the questions asked of those canvassed by the labor bureau for this report was one relating to immigration. The desire was to get the opinion of the wage-workers as to the desirability or non-desirability of restricting the inflow of other nationalities upon the United States soil, and particularly upon that part under the control of the people of this commonwealth.

The answers to this question indicate in a general way that a majority of those canvassed favor the restriction of immigration. But many attached provisions to their answers, many added conditions to their "yes" or "no." It is, therefore, both appropriate and pertinent to look a little into these objections to immigration, and see how much value should be attached, from the standpoint of the wage-worker, to the general opinion that the restriction of immigration would result in steadier employment and higher wages for the working class already on these shores.

Some of these conditional answers to the question of immigration were:

"I favor keeping out all foreigners, unless they come to stay."

"No Canadian should be allowed to work here, and then spend our money in Canada."

"Open the door to all except those unable to work, or confirmed paupers."

"Keep out every foreigner but artists. There is no true art in this country."

"Anarchists and socialists are the only ones who should be prevented coming to this country."

"Let in everybody but Chinamen."

"No more should be allowed to land. There is not enough work for us who are here now."

"The more who come, the less there will be for us to eat."

"It does not seem to me that the restriction of immigration will help us wage-workers anything to speak of."

"Immigration and big families are the two great curses of the working men in the United States who have to work for a living."

On one thing all are substantially agreed: The people of the United States do not desire, and will object to receiving, cripples and those who are in any way afflicted with contagious or other serious diseases. It is plain that such classes are undesirable both economically and socially. They are consumers and not producers, and consequently their presence lessens the average wealth of the nation, and burdens the wealth producing classes with their maintenance. They can do nothing but inflict an injury; they can be nothing but incubuses and poverty producers.

Another class, also, general opinion objects to as undesirable immigrants. This class is known as the "pauper" class. But the word "pauper" is commonly used to mean so many different things that the word should be defined before using. According to Webster a pauper is "a poor person; especially one so indigent as to depend on charity for maintenance; or one supported by some public provision." If all poor persons were put in the class of paupers, it is feared the majority of the inhabitants of Michigan would have to plead guilty to the impeachment; certainly this is not what is meant by "pauper." The other definitions are the better: "One so indigent as to depend on charity for maintenance; or one supported by some public provision." And

it is certain that 999 persons out of every 1,000 are united in declaring that paupers as above defined, should not be allowed ingress. The other one person in a 1,000 would probably declare for the immigration of paupers in order to have proper objects on which to bestow charity.

But is this what is meant when speaking of "the pauper 'labor' of Europe," or "the pauper 'labor' of Canada?" The answer can be nothing but "no." The demand for the restriction of immigration reaches those who are neither crippled, diseased, illiterate, ignorant or lazy. It is a demand that the strong, healthy, ambitious young men and young women of Canada, for example, shall not be allowed to cross the Detroit river for the purpose of bettering their social and financial condition. It is a demand that the hardy Pole, or Italian, or German, or Irishman or Englishman, eager and anxious to work—so anxious to earn his own living that he will labor hard for very little—shall not be allowed to step upon our shores. It is a demand that the very classes shall be kept out for whose benefit a few years ago, the Michigan legislature established an information bureau, and had printed in numerous languages, pamphlets, with maps and other illustrations, telling them of the resources of Michigan, and imploring them to accept of its natural wealth, and so help to build up a prosperous commonwealth. These are the people whom those who favored the restriction of immigration, in answer to the question put by this bureau, wish to keep out. They demand that people able and willing to work shall not not be allowed this privilege. They ask that all except those born in the confines of the United States shall be denied the right to change their habitation in the pursuit of happiness, if such pursuit happens to point in the direction of this republic.

The demand that "anarchists," "communists" and "socialists" should be kept out and if already

here, should be sent back, is not one calling for very serious thought. There are anarchists and anarchists, as there are socialists and socialists. Some are very obnoxious, some are not only not harmful, but are really helps in building up an intelligent and self-respecting democracy. The anarchists who would wantonly destroy either life or property; or the communist who wants to divide other peoples' wealth among the undeserving; or the socialist who would rob the prosperous for the benefit of the lazy, are dangerous persons, and society has the right to make regulations, even to the point of exclusion, to protect itself. But are there such in this country? And, if so, where are they, and how many? The Michigan commissioner of labor has a wide acquaintance among all classes of social reformers, but he must confess that so far it has never been his fortune or misfortune, to come across either anarchists, communists or socialists who teach or practice such foolish doctrines. On the contrary, the anarchists, communists and socialists of his acquaintance, are in the main, industrious, law-abiding citizens, above the average in intelligence, whose only sins, if they are sins, are in making some one phase of the labor movement too prominent compared to all the elements and incidents that enter into the problem. It is safe to assume that all the vicious anarchists, communists and socialists in the United States could be transported in the hold of any one of those ocean steamers making a business of carrying human freight. They are so few compared to the entire population, that the effect of their presence on work and wages must necessarily be infinitesimal.

If, however, all those who have socialistic views were to be excluded from the benefit of this country, it is doubtless true that a great exodus would occur. All the ships would be unable in a year, to transport them to other shores. This is because certain

phases of socialism have become very popular, so much so that not a few see what Herbert Spencer calls the "coming slavery" in the near future. The people's party movement has certain well defined socialistic features. Bellamyism which has a large following is socialistic; and even the honorable mayor of Detroit is to-day advocating certain reforms in municipal government which his enemies denounce as extreme socialism. Yet neither the members of the people's party, the followers of Bellamy nor the mayor of Detroit are undesirable citizens. Few of them but what produce more than they consume, and doing this they must necessarily be defenders of the rights of property, and upholders of all morality and good government.

Why do people desire the restriction of immigration—the stoppage of the inflow of those able and willing to labor? It is because they think it will reduce the competition for work, thus making their own employment steadier, and probably at an increased wage. Simmered down, that is what it amounts to. They think there are too many people here already. They see, in their own experience, that the average number of days in the year in which they are employed is decreasing, and that, while the average wage per day has increased, yet at the end of the year, their idle time has kept them in poverty. So they reason that if fewer workers were competing for work, the amount of work to do would be performed by fewer persons and be spread over a longer period, to the benefit of themselves and their families in the increase of the amount of their annual receipts. It is self-protection that leads them to favor non-immigration.

The same idea crops out in the reply of the carpenter who thought that big families were a curse. Big families grow into men and women, and these must in due time labor for a living, thus competing



with others for a living, thus competing with others for work. The belief seems to be, the fewer there are of us, the better off we will be.

Is this the true remedy for low wages and lack of work? Will restricting immigration or reducing the size of families give steadier employment or better pay? The writer is compelled to answer, "no." There can neither temporary or permanent benefit arise from following such a policy. An impassable Chinese wall around the country would not favorably affect the average wages of the country or prevent the rise of millionaires and the increase of the number of poverty-stricken wretches to be found in every nook and corner of the land. It is possible that in some trades in some localities, and in some occupations a temporary advantage might be gained by excluding those who would immediately compete with the workers already here. But such temporary gain would, by inviting competition from those engaged in more illy compensated lines of work, eventually reduce the wages to the average, even if wages did not in the reaction, as is very likely, fall below this life line—the cost of maintaining a family in the manner demanded by that class of labor.

The true remedy for lack of work and poor wages does not lie in the direction of restricting healthful and natural immigration. Michigan has soil sufficient to support with all the comforts of life more than 5,000,000 people. Michigan has wealth enough within its borders to employ anywhere from 1,000,000 to 2,000,000 wage workers.

Can there then, be too many wealth producers competing for work in a population of 2,200,000 souls, or about 500,000 wealth producers? Only about 9,000,000 acres of Michigan's 36,000,000 are under cultivation. There are at least some 18,000,000 acres of virgin soil remaining capable of being put to productive uses.

What is true of Michigan is true of the United States as a whole. There is ample room for 1,500,000 souls between the great lakes and Mexico, between the Atlantic and Pacific oceans. The country is rich in resources that have never been touched. There is only needed the magic touch of intelligently conducted labor to double the per capita of wealth and immeasurably increase the happiness of all. There is enough labor to be performed to give every one employment at remunerative wages. Indeed there are not too many wealth producers in the country; there are too few to do the things demanding attention. What is needed is not restrictions on liberty, but the abolition of those restrictions, that make the laborers beggars for employment and destroy their manhood from the very love of their wives and children. Each desirable immigrant brings with him to this country, not only an intelligent, directing brain and a pair of willing hands, but also a stomach to be fed, a back to be clothed and a human soul to be housed. He is a consumer as well as a producer. He gives work to others as well as does work himself. He has wants that must be supplied and that keep pace with his improved social and economic condition. The weaver of cloth, the maker of shoes, the moulder of stoves, the cultivator of the soil—all are called upon to supply his wants, for which he in return gives a quid pro quo—full value. This is the only condition on which the others will exchange the results of their labor for his. Now what damage has he been to the community? Has not he really been a benefit? Suppose a book-keeping account were kept between him and the community. It would read something like this:

Mr. Immigrant,

In account with the community.

CR. By one week's work.....	\$ 10 00
DR. To one pair of shoes, labor cost.....	\$ 2 00
To meat and vegetables, labor cost.....	1 00
To flour and sugar, labor cost.....	1 00
To fuel, labor cost.....	50
To cloth, labor cost.....	2 00
To rent.....	1 50
	<hr/>
	\$ 8 00
Profit on sales.....	2 00    \$ 10 00

Thus Mr. Immigrant has exchanged his labor, valued in the market at \$10, for labor valued in the market at \$8, has given the employer of that labor \$2 profit, and has given employment to weavers, shoe-makers, miners and farmers. In all this, who is injured?

Take the case of a Canadian who works in Pingree & Smith's shoe factory in Detroit, for example, and lives in Windsor, Canada:

Mr. Windsorite,

In account with the community.

CR. By one week's work which sells in the market for.....	\$ 15 00
DR. To wages earned.....	12 00
Profit to community.....	<hr/> \$ 3 00

Has there been any loss here? Is not Detroit \$3 better off for Mr. Windsorite's labor? What has he taken away with him? Maybe gold, maybe silver, maybe paper money which is a certificate exchangeable for the precious metals. But whatever he has taken he has left more than he took. For the gold or silver that he took is of less value than the shoes he made. Gold is simply another form of labor, and its "loss" is no more to be deplored than the "loss" of shoes that wear out, or of what is consumed.

There can be something said in favor of the Canadian working in the United States and living in Canada. If the Windsorite lives in Windsor and works in Detroit, he competes for work alone. If he both lives and works in Detroit, the competition between laborers for work is the same, but the competition between laborers for houses is increased. His presence as a citizen is accompanied by an increase in rents, which is equivalent to a decrease in wages. Increased rent for land is always at the expense of the wealth producer; and the fiercer the competition for the soil, the less the wage worker has to purchase the comforts and necessities of his existence. Widen the habitable area of those making Detroit the place where they exercise their faculties in the production of wealth, and the result is cheaper land, which means a less outlay for rent. This is just what permitting one to work in Detroit and yet live on the other side of the Detroit river does. If half of the citizens of Detroit could find some other spot in which they could live, and yet still work in Detroit, it is evident that rents would fall. Cannot it be clearly seen that those who work in Detroit and yet live in Windsor are, in the matter of rents, doing a service to Detroit renters?

Here is a truth worth grasping: If there were fewer Canadians, or Italians, or Poles, or other foreigners in the United States, there would be less work for us who are already here. Immigrants do not deprive Americans of work. They give employment to Americans and others, and always exchange their labor products to the advantage of both sides to the bargain. Business is carried on under no other condition; it could be carried on under no other condition. It must be profitable, or it ceases to be.

The apparent over-supply of labor arises from a very different cause than immigration. It has its foundation in the fact that the natural outlet to labor is clogged. This outlet is the land. The United States census of 1880 shows that 20 per cent. of those engaged in all the occupations were foreign-born; but

only 4.85 per cent. of those engaged as agricultural laborers were foreign-born. Yet 14.69 per cent. of the farmers and planters were foreign-born. This seems to indicate that whenever their finances allow, foreigners go upon the land; so that it is safe to assume that were fertile and accessible land practically free, a much larger percentage of foreigners than now, would go upon the land, thus relieving the congestion in the cities. The bar to the land is its legal possession by those who do not occupy it, or work it, and who demand toll from every one who is willing and anxious to exert his strength and intelligence in making it fruitful.

In another part of this report is shown the fact that the people of the United States are paying over \$5,000,000 in royalties annually to the owners of certain mines and pine lands for the privilege of working the mines and going upon the lands and cutting down the trees. The diverting of this great sum from natural channels—the pockets of the producers—to an unnatural one—the pockets of the non-producers—must necessarily hamper production and discourage enterprise. As a result, there is less demand for labor, and in consequence greater competition among laborers—two evils that rest heavily on wage-workers, and that seem to prove that there are too many workers in the world, and too many good things being produced. Too many good things in the world? What a ridiculous statement! In no one line of human activities are there too many good things. There may be a disproportion of one good thing compared to another good thing; but it is not because there are too many of the one, but because there are too few of the other. Where there is an apparent over-supply of one article, investigation will develop that there is an under supply of others. There cannot be too much wheat or too many shoes produced, while one person has not tasted white bread, or one person goes barefooted. In all probability one-half the human race does not know what wheat bread is, while an-

other half is innocent of the possession of shoes, or anything but the rudest and most primitive kind of foot covering.

Make it easy for the people to reach fertile land without paying toll, and the immigration flurry will assume its due proportions in the labor problem. The congestion in the commercial centers will find a natural outlet; the manufacturing interests of the land will have broader and better markets for their wares; and mechanics, artisans, tradesmen and laborers alike will feel the throb of quickened commerce; the poor-houses, soup-kitchens, and all kinds of eleemosynary institutions will have to search for patrons on which to bestow their charity.

There are dangers from immigration. The workers of each nation have their rate of life—that is to say, their social customs that regulate the cost of rearing a family and supplying its members with those things necessary for their existence, and which enables them to “be as good as their neighbors.” This rate of life regulates the rate of wages. As a rule, people will work for what will enable them to keep up this rate. The satisfaction of their desires is obtained by this wage. Now, it is plain that were a nation with a high rate of life to be suddenly deluged by intelligent and capable laborers, whose rate of life was much lower, the competition would bring a hardship on those of more expensive tastes. There are sections of the United States where such a state of affairs has existed. One is California, another is Massachusetts. In one the Chinese have worked evil to the American; in the other the French Canadians have driven those of other nationalities from the cotton factories. The only economic basis for Chinese exclusion is the fact of their slow assimilation. They seem to be the same to-day, yesterday, and forever. Therefore, they menace civilization, and their exclusion becomes an economic and social necessity. There is no other nation seeking our shores of which this can be said. All others almost immediately raise their rate of life, and become as tenacious of their “rights”

as those to the manor born. They acquire more expensive habits, and demand a wage sufficient to enable their indulgence.

But under those conditions which would practically give labor unoccupied land free, and that would give to society for society purposes those values created by the community, the dangers of any trouble arising from a conflict by reason of different rates of life by different nationalities, would be reduced to the minimum, as no one would work for anyone else at a less wage than he could earn working for himself. The employers would be compelled to pay that rate of wage which would satisfy those of the highest rate of life seeking employment in that particular calling; and as the tendency of humanity under natural conditions is to progress, the tendency of wages would be steadily upward, until the wages paid was the equal in value to the labor performed. That is the highest rate wages can attain.

The history of the world tells the story of comparatively high wages, prosperity, steady employment and absence of poverty, wherever an intelligent and industrious people enjoy the blessings of a free and fertile soil, and an economical and honest government.

With millions of acres of rich lands in the United States still unoccupied, the time is far distant when there will be even an approach to population outrunning subsistence—to the time when there will be no more people desiring work than there is work to be performed.

No restrictions, but liberty, is the true remedy for the congestion of human beings in the commercial centers of the land.

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## ILLINOIS.

The report of the labor bureau of this state is entirely devoted to an investigation of the condition

of the working women of Chicago—treating of their earnings, lost time expenses, years at work, education, home surroundings, etc. It also shows an investigation of the sweating system in Chicago. Six thousand females is the basis for the statistics. They were employed in ninety-five establishments, in forty-three industries, pursuing 474 different occupations, 43 per cent. of whom earn an average of \$18.18 per week, and 57 per cent. average \$4.91; twenty-one earned less than \$2 per week, and seventeen more than \$20 per week. Separating the forewomen, office force and others of that class from the operatives, the average earnings of the latter class is found to be \$5.93 per week—47 per cent. earning more, and 53 per cent. earning less than that amount. Three thousand three hundred of the number are women, 95 per cent. of whom were unmarried; 84 per cent. of the total number of girls live at home with their parents. Of the 2,578 operatives, 360 report a saving of \$63.14 for the year, and twenty-four report \$21.71 of a deficit. Owing to the fact that so many were not entirely dependent upon their earnings for support, no adequate comparison of income and expenses can be made.

With regard to the sweating system in Chicago, the commissioner explains:

In practice, sweating consists of the farming out by competing manufacturers to competing contractors, the material for garments, which, in turn, is distributed among competing men and women to be made up. The middleman, or contractor, is the sweater (though he also may be himself subject to pressure from above), and his employes are the sweated or oppressed. He contracts to make up certain garments at a given price per piece, and then hires other people to do the work at a less price. His profit lies in the difference between the two prices. In the process he will furnish shop-room and ma-



chines to some, and allow others, usually the finishers, to take work to their living and lodging rooms in tenements.

The sweater may be compelled to underbid his fellow contractor in order to get the work, but he can count with a degree of certainty on the eagerness of the people who work for him to also underbid each other, so as to leave his margin of profit but little impaired. The system thrives upon the increasing demand for cheap ready-made clothing, cheap cloaks, and cheap suits for children, which demand springs in turn from the rivalry of competing dealers and producers. Thus each class preys upon the other, and all of them upon the last and weakest.

Such is the logic and the operation of the process called sweating. It is practiced somewhat in other industries, but finds its fullest scope in the garment trade, because the articles can readily, and with comparative safety be distributed to the shops and abodes of the workers. But the system is not new except in new countries and new cities, and it is now hardly new in Chicago.

In this country the whole ready-made clothing trade rests upon the sweating system in some of its various forms. From Boston, for many years, garments have been sent throughout New England, to be made by the wives and daughters of the country people, but the more recent immigration of Poles and Italians to that city has introduced a new form of cheap labor, and much clothing of the poorer grades goes to their shops and is finished in their homes. Recent legislation and tenement inspection has, however, done much to improve sanitary conditions among them, and remove much of the danger of infectious diseases.

From Philadelphia, garments are sent into New Jersey and Delaware, as well as throughout the farming districts of Pennsylvania, to be stitched by women. Vast quantities of clothing, such as cotton and woolen shirts and women's underwear, are

farmed out under contract to charitable and other institutions, while clothing for the army and navy, and for the postal service, is largely made under the sweating system, both in Philadelphia and Baltimore.

The great center of the clothing trade is, however, in New York City. There whole streets are reported as having shops or home finishers in every house. It is particularly difficult to ascertain the number of persons thus employed in that city, because it is augmented by every shipload of emigrants from Russia, Bohemia, Scandanavia and Italy, and again reduced by deportations to the west. Sweaters' shops are now scattered even among those villages of Long Island and New Jersey, which are easily accessible by ferry-boat from New York. No successful check upon the system has yet been accomplished by legislation in that state. A measure recently passed embraces somewhat trenchant provisions, but its results remain as yet to be seen. The reports of the factory inspector reveal a state of things not surpassed by the English reports.

In Chicago, where it dates back scarcely a generation, the sweating system seems to be a direct outgrowth of the factory system; that is, the sweat shops have gradually superseded the manufacturers' shops. It increases with the demand for cheap clothing, the influx of cheap labor, and the consequent subdivision in the process of manufacture. In the clothing trades in Chicago, three different sorts of shops have been developed, known among the employes as the "inside shops," or those conducted on the factory system by the manufacturers themselves; the "outside shops," or those conducted by the contractors; and the "home shops," or family groups.

It is the judgment of the agents who performed this work, and whose whole time was devoted to it for several months, after making due allowance for such obscure and remote shops as may have escaped observation, that 800 would be a broad estimate for

the whole number of sweat shops in Chicago, and that 13,999 may with propriety be assumed as the maximum number of people who derive work and wages from them.

In the sweater's eagerness to reduce the item of rent, he seeks not only obscure and inexpensive locations, but for the same reason crowds as many people and machines as possible into the rooms which he hires.

From a table given it is shown that in 466 shops, employing 6,820 persons, the average number of cubic feet of air space for each person was only 448 cubic feet, while authorities in sanitary science declare that from 750 to 1,000 cubic feet per head in shop rooms is necessary to the maintenance of health.

There are about three times as many women as men connected with the sweat shops. There were in all 10,933 persons enumerated as employes of the 666 shops visited. Of these, 2,669, or about one-fourth, were men and boys; the remainder women and girls. Of the former, 221 were scheduled as boys—not as youths nor young men, but simply as boys. It was useless to inquire about ages, but the distinction between the boy and man is always sufficiently patent. Boys, proper, are employed as messengers or errand boys, to carry goods to the button-holer, or to the finisher, or to fetch beer, and they usually receive about \$1 per week. From this stage of usefulness they emerge, after a year or two, into regular shop hands, if they have not improved their opportunities to run away.

In the absence of an age classification between women, young women and girls, the distinction is more difficult, but there were listed in all, 8,264 of the sex, 1,939 of whom were recorded as women, and 6,325 as young women and girls. Of the former, 1,836 were reported as home finishers by the several sweaters who furnished them work—that is, they were on

the shop lists as outside workers; they were also mostly married women. This leaves 103 of the older women, and 6,326 girls at work in shops. In fact, the young and unmarried women constitute pretty much the entire female force in the shops. Judging from appearances, most of these girls are from 16 to 20 years of age; but there is a contingent in every shop of any importance, or in every dozen girls, who belong in the ranks of childhood, and who may be anywhere from 10 to 14 years of age. They correspond in years with the boys before mentioned, and they are employed as button-girls—that is, to sew buttons on, pull out basting threads, or to smear button-holes before they are worked. Whatever they do, however, they must do industriously and continuously, under a system of task service, and exposed to all the evil conditions and oppressions of the sweat shops. In number, they are more than the boys of similar age, and their lot is a harder one, by reason of their helplessness and confinement within the shops. From their primitive labors these little ones soon develop into hand-sewers, with bodies forever bent by their work, or into machine operators, driving machines at unseemly speed and at unseemly hours.

Observation among sweated people confirms the opinion that a direct consequence of their occupation is a general impairment of health in both sexes; in men the debility takes the form of consumption, either of the lungs or intestines, and of complete exhaustion and premature old age. The girls become victims of consumption, dyspepsia and life-long pelvic disorders. These are the results of the over-exertion, bad housing, under-nourishment and noxious surroundings common to their calling and condition in life. But in addition to the disabilities, they are constantly exposed to the inroads of typhoid and scarlet fevers, and other zymotic diseases. Cases of this kind develop in the tenements and but too often have but scant medical or other attendance. At the same time and in the same

apartments, quantities of cloaks, clothing or children's garments may be present in various stages of finishing. It is hardly necessary to establish the fact that children's clothing is sometimes thus exposed and thus infected with the most fatal maladies of childhood, for it is apparent that under the given conditions, entire immunity from infection could not be possible; yet the following instances of disease in the presence or proximity of garment making are cited as those which came under the observation of the bureau:

A grandmother was found dying of cancer, without medical attendance, in the same room with a man and his wife and three children. The man and his wife were at work finishing men's coats, many of which were lying about the room.

In a tenement house a man was found just recovering from malignant diphtheria, while in the room adjoining, on the same floor and in the room above, knee-pants were being finished, and the work had not been suspended during any stage of the disease.

Two children with a loathsome skin disease, were sewing buttons on knee pants. The mother, to show how bad the case was, passed her hand over their faces, brushing the scales upon the clothing.

A mother was visited who was at work on silk faced summer jackets for ladies. In the same room was a child sick with scarlet fever.

At all these places, and in hundreds of others, the utmost squalor and filth prevailed, with an absolute negation of every sanitary provision or precaution.

Although these four instances are the only ones encountered in visiting over 100 tenements, they are quite conclusive enough as to the possible consequences of permitting clothing to go into tenement houses at all."

In commenting upon the pay roll of one sweat shop employing seven men and twenty-six females, the commissioner says:

"The noticeable feature in this pay roll is the number of different rates of wages paid during the year to the same person employed in the same work. In general, the second rate is somewhat higher than the first and subsequent rates continually decline. In one case the woman begins at \$5.50 a week, afterwards receives \$6, and then six other rates, each smaller than the preceding one, and the last \$3.75. She worked fifty weeks and received for it \$199.60, or an average of \$3.99 a week. Another beginning at \$3.75 is raised to \$4, and thereafter reduced through six changes to \$1.59 a week, her average for forty-six weeks' employment being \$2.72 a week. On the other hand there are some cases in which the last rate is higher than the first, and throughout there is a total absence of uniformity.

Among the startling figures in this table is the record of a girl who worked thirty-nine weeks at wages declining from \$2 to 80 cents a week, and who earned a total of \$38.79, or an average of a decimal less than \$1 a week; another worked thirteen weeks at \$1.75 and 1.50 a week, averaging \$1.51; and another worked seven weeks, beginning at \$1, being raised to \$1.25, and then reduced to 75 cents a week, and earned in all \$6.46, or an average of 92 cents a week.

The ordinary hours of labor required in the best shops are ten each day for six days in the week. In the worst shops in the busy season, sixteen hours are frequently required—that is, from 5 a. m. to 10 p. m., seven days in the week. Those who work by the day or week receive extra pay, or an increase in the rate of pay as the season advances. This increase in the busy season is intended, apparently, in some instances, to compensate for additional hours of

labor, though it is found alike in shops where the ten-hour day is adhered to throughout the year, as well as in those where the daily hours are from six in March to sixteen in August. In other shops the hours in excess of ten are paid for at the same rate as for other hours. Thus, if a hand-girl who works for \$3 a week, or 50 cents a day, and 5 cents an hour, works twelve or fourteen hours in a day, she will receive 10 or 20 cents more for that day than for ordinary days.

The report contains the descriptive details of 173 persons found at work for sweaters in tenement houses. Following are some of the most unfavorable reports:

Vest finisher—Swedish woman of 50, finishes vests at 10 and 12 cents per dozen; in six months earned \$57.08; five years in America, but speaks no English; complains that the sweater does not pay until thirty days after delivery of goods, then not in full.

Vest finisher—Polish woman of 60, husband superannuated; finishes vests at 1 cent apiece; earned 64 cents in one week; has no book but thinks she earned \$50 or \$60 in five months; eleven years in America; speaks no English; takes four adult male boarders, and with her sewing supports her husband.

Hand finisher—Polish woman, 50 years old, widow, two months in America; has earned \$3 finishing trousers at 51-2 cents apiece; has never attended school; with the assistance of three others she supports a family of eleven persons. They all live in four rooms for which a monthly rental of \$7 is paid.

Machine hands—Two Russian girls 16 and 17 years old; have worked regularly for three years, stitching knee-pants at from 6 to 10 cents per dozen pairs. They work ten hours and stitch three dozen

pairs a day. They rent two machines for which they pay \$1.50 a week. The family of four occupy four dark rooms on the ground floor of a wretched tenement. The girls support their mother. Their brother, who is a teacher of Hebrew, paying their rent. They have attended school in Russia and have learned to read, write and speak English.

**Hand finishers**—Two Italian families live together in three small rooms; each family pays half the rent. The total amount being \$7 per month. The two husbands are fruit peddlers. The wives work together finishing knee-pants at 7 cents per dozen pairs; they finish five dozen pairs per day. They are each aged 26 years; have never attended school; speak no English. In this house a man has just recovered from an attack of malignant diptheria, without having interfered with the work of finishing knee-pants in this room nor the one above.

**Hand finishers**—Italian woman and three daughters, who finish knee-pants at 8 cents per dozen pairs. By working steadily they can altogether finish eight dozen in a day. They do not know the name or address of their employer. They live in filth in the basement of a rear tenement; they speak no English; have never attended school; the father is a sewer digger; the mother is 36 and the daughters 14, 15 and 16 years of age.

**Hand finisher**—Italian woman, 28 years of age, finishes 3 1-2 dozen pairs of knee-pants in a week, for which she receives 5 cents a dozen; has been in this country three years; speaks no English; lives with her husband who is a street sweeper, in one room in a cellar with clay floor; the monthly rental is \$3.

**Hand finisher**—Russian girl, 19 years old, finishes cloaks at from \$4 to \$6 per week. She works in a shop, then observes Saturday as her Sabbath; on Saturday her employer carries home all they can do and she goes to his bedroom and works all day Sun-



day by his machine; he also works. She has been in America one year; speaks no English. Her father has no work. There are four in the family who are supported by this one girl. They live in one wretched room and in a bad and filthy neighborhood.

Hand finisher—Italian woman, aged 25, finishes handsome cloaks with fur collars, for which she is paid 4, 5, 7 and 11 cents each. Her husband is a street sweeper; they have been in America eight months; they pay \$10 per month for rent of four rooms, which are occupied by 18 persons, nine of whom are children, and four are adult male lodgers. This woman has never attended school, and speaks no English. Home conditions very bad.

Hand finisher—Italian woman, aged 22, finishes silk-faced ladies' summer jackets. Baby ill with scarlet fever in same room. This, however, does not interfere with cloak finishing. This woman speaks only Italian; cannot read, write or cipher in any language. Contractor agrees to pay from 2 to 5 cents apiece, but she has no idea whether he pays as he promised or not. Her husband is a street sweeper and has regular work in good weather.

Shirt-waist maker—Irish woman, 30 years old, makes ladies' waists at 35 cents a dozen. These waists must have three plaits in front and three in the back, a rolling collar, and twelve button holes and buttons. She is very much pleased when she succeeds in making eleven waists in a day. Her husband is a teamster; they have one child; live in three rooms on second floor of a rear tenement, the monthly rental of which is \$7.50.

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### COAL IN ILLINOIS.

Two hundred and sixty-two mines produced from 10,000 tons to over 100,000 tons in 1892, 335 less than 1,000 tons and 242 less than 10,000 tons.

From the eleventh annual compilation of the statistics of coal production in Illinois, gathered by the bureau of labor statistics from the reports of the state inspector of mines, the following totals and averages are given:

No. of tons of coal of all grades mined.....	17,862,276
No. of tons of lump coal.....	14,730,963
No. of tons of other grades.....	3,131,313
No. of miners.....	25,321
No. of other employees, including boys.....	8,311
Average number of days of active operations, shipping mines.....	219.5
Aggregate home value of total product.....	\$16,243,645

The average wages of machine men per diem is given as follows: Cutters, \$2.27; blasters, \$2.20; helpers, \$1.74; laborers, \$1.75; timberers, \$2.05. Hand miners working by the day earned on the average throughout the state as follows: Miners, \$2.16; blasters, \$2.18; timberers, \$1.97; loaders, \$1.73; average, \$2.00. The machine men produced four tons per man per diem, and the hand miners 3.52 tons per man per diem.

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## INDIANA.

William A. Peele, Jr., chief of bureau of labor statistics, in his remarks, says: The bureau assumes that the prosperity of the state is largely dependent upon the prosperity of the laboring classes. They constitute the great majority of the people; they are the builders and the preservers of all things which demonstrate progress.

The statements of the proprietors, exclusive of the coal mining industry, give the number of employes as follows: Men, 28,830; boys, 1,852; women and girls, 1,778; total, 32,460. Of the 28,830 men, it is assumed from statements furnished by employes that 60 per cent—17,298—are married, and

that the average number of the family is four persons, representing the families named, 69,182 persons, and a total including the single men, boys, women and girls, of 87,974 persons.

Omitting average wages paid boys, women and girls, and including only men engaged in skilled and unskilled labor, it is seen by the statements of proprietors that the average wages paid is \$1.85 per day, and by reference to the employes' statements, the average pay is \$1.95 per day. The average number of working days in the year being 264, the average yearly earnings, as per proprietors' statements, would be \$488.40. An examination of the tables will show that, to arrive at an average of \$1.85 per day, wages begin at less than \$1 a day, and, as has elsewhere been stated in this report, averages in determining wages, are seriously misleading, though unavoidable in compilation of statistics, a fact which requires careful analysis on the part of the student of labor problems.

While it may be assumed that a family of four persons may live with a degree of comfort on \$488 a year, the problem becomes difficult of solution when the income is only \$264 a year, which the laborer at \$1 a day receives for his 264 days of toil.

As a result, labor, while not demanding of legislatures, laws which determine wages, does demand such legislation as guards it against the over-reaching methods of employers.

Legislation in the past has taken cognizance of certain questions relating to the welfare of labor, as for instance, in Indiana the employment of Pinkerton mercenaries is not permitted by individuals or corporations, and thus Indiana is relieved of a disgrace which other states still permit to exist. Indiana has sought to do away with the monstrous iniquity of "pluck-me stores," by the operation of which employes were reduced to a species of bondage inconsistent with the elementary ideas of lib-

erty, giving to employers, especially in the mining districts of the state, privileges which reduced labor to a form of slavery in direct conflict with the genius of democratic institutions. Legislation in Indiana has also sought to determine the hours constituting a day's work, eminently wise in all regards, but which has as a general proposition, by virtue of a proviso, been rendered practically a dead letter upon the statute books of the state. Other laws have been passed looking to the emancipation of labor from enthrallments which the past has imposed, and for the relief of which only wise laws are adequate.

This bureau does not hesitate to say, that with labor, everything depends upon wages. It is the desideratum, the one thing above all others that concerns working men and working women, and therefore the highest welfare of the state. The question of wages touches home, respectability, liberty and independence. It relates to food, clothing and shelter. It includes education, school and church—a decent life and a decent burial. This question of wages confronts society, morning, noon and night.

It is discussed at home, in the shop, on the streets, in the lodge room, in the store, in banks and on 'change. It will not down, be silenced or obscured, and it has been the purpose of this bureau to obtain such data relating to wages in Indiana in the industries tabulated, as would afford the student of such questions bed-rock facts upon which to construct theories relating to the condition of labor in Indiana.

It is a matter of exceeding regret to me that I cannot make extended quotations from this comprehensive report, particularly with reference to wages and living expenses. The following quotations must suffice:

In attempting to demonstrate how a machinist or any other laboring man manages to live on \$312,

we have only two items that can be pronounced authoritative, earnings and rent; all else is assumed. The bureau attempts the solution of the problem in the following itemized statement:

Annual earnings.....	\$ 312 00
For three adult persons, 365 days, three meals a day, 3.285 meals, at five cents each.....	\$ 164 25
Fuel, at \$2.00 a month.....	24 00
Doctor bills and medicines.....	15 00
Clothing, \$8.25 each for three persons.....	24 75
Rent.....	84 00
Total.....	<u>\$ 312 00</u>

In the foregoing statement the lowest rate is given, the one item of expense that is not assumed, and as has been stated, the remaining items in the account are conjectured, but the amounts are adjusted to bring the total within the total earnings, \$312 a year. The question arises, Can the amount set opposite any one of the items be reduced? Indeed, can it be obtained for that sum? Can fuel be had for less than two dollars a month? Can an adult person be clothed for a year for a sum less than \$8.25? To each of these questions you would give a negative reply and it only remains to ask if \$15 is an exorbitant amount for medicine and medical attendance? The result of such inquiry will be that each item, except that of rent, will be regarded as too low, and that in Indiana a man can hardly subsist a family of three adult persons on \$312, unless he resorts to an economy that deprives him of everything in the nature of luxuries.

It is shown that the iron industries report 669 laborers, average wages, days employed and earnings, as follows:

Average highest daily wages.....	\$ 1 79
Average lowest daily wages.....	97
Average daily wages.....	1 33
Average number days employed.....	242
Average annual earnings.....	323 00

The average annual earnings of laborers is given at \$323, but the tables show that in twelve instances the annual earnings go below \$323, and are \$298, \$294, \$283, \$260, \$259, \$249, \$204, \$293, \$165, \$136, \$122, and \$117. It is furthermore seen that of the 669 laborers, 409 are married, having a total of 1,783 in their families, an average of 4.3 to a family. The average annual rent paid by laborers is \$88, and deducting this amount from their earnings, leaves the question: How do they manage to live on the remainder? one of the most perplexing that can be submitted to the public.

#### REMARKS BY EMPLOYEES.

Moulder.—Wages, \$1.40; married; rent, \$8; can not save any money. In answer I would say that working men are most interested in finding steady employment, better wages, fewer hours, and a right to vote as they please without losing their friends.

Laborer.—Wages, \$1.40; single; save a little money. I would like to see every laboring man receive at least \$1.40 a day, and all given a chance at the trade in which he is supposed to be a common laborer. The men of this shop are interested in the insurance of the men of the shop. When one gets hurt while working, he is to draw half of his pay. If the hurt is so serious that the man has to lay off, the company keeps 10 cents on the dollar off to pay the injured man. Now, what I am talking about is this: We have to wait till we are able to work before we get the money, if it takes a year. Now we want to know what good it does us. And the worst of all is this: That the men who were hurt a month or so ago, and who are working for the last week or two, have not yet been paid, nor does the company seem to make any headway in that direction.

Machinist.—Wages, \$2.50; married; three in family; rent, \$9; can save some money. I am in favor of the eight-hour law, and for ten hours' pay for

eight hours' work; also, time-and-a-half for overtime, and double time for Sunday work. The cursed monopoly of real estate speculation, and the high rate of interest on money are the chief causes why the laboring classes do not own the houses in which they live.

Laborer.—Wages, \$1.12; three in family; family assists in supporting family to the amount of \$100; owns the house he lives in. My view is that anything less than \$1.50 a day is not fit to support any hard-working man.

Brass-moulder, journeyman.—Please excuse one who makes no pretensions as to education. It seems to me that a law restricting immigration would give immediate relief in a country where there are hundreds of thousands of men, the majority of them willing to work, but who are displaced by the pauper laborers of Europe, who accept any wages, no difference how small. Piece-work should be abolished; it is demoralizing every trade. Indiana has an eight-hour law, but it is a dead letter; especially so long as pauper laborers from Europe are willing to work from sixteen to twenty hours out of every twenty-four. It amounts to nothing. For one who has given thought to the labor question, and who does not believe there is a cure for every ill in this sin-cursed world, I am convinced that, until the producers rise in their might and elect men from their own ranks, who will pass laws controlling the railroads and the banks of the United States, and compel foreign syndicates and every citizen of the United States to sell all lands not needed for special use, the ills which now afflict us will continue, and grow worse, until a few men will own all the land and money, and the many will be slaves.

Blacksmith, journeyman.—(1) A fixed number of hours for a day's work, and punishment for the boss that works his men overtime. (2) A law against requesting men to work on Sunday, and fine or imprisonment for the men in charge, or the employer. (3) I

think the number of hours constituting a day's labor should be reduced at least one hour. The law as it stands is nothing; that is the way it looks to me, as all the employer has to say is to work till 9 or 10 o'clock, as the case may be, and fully three-fourths of them have to do it or be discharged. A law without a penalty is useless, so far as working men are concerned.

### WOOD INDUSTRIES.

Of 119 establishments, employing 2,885 persons, averaging 3.47 persons to a family, or a total of 5,879 depending for support on 1,726 of the above workers, the average daily earnings were \$1.74; number of days employed, 262; annual earnings, \$457; average rent paid by 1,037 persons, \$93.12.

### WOOLEN INDUSTRIES.

Average wages paid per diem, \$1.48 for 238 days, or \$352 per annum.

### COAL MINERS.

Fifty-two mines report a product of two million tons in 209 days, by 5,061 miners, an average of 398 tons per capita. In pick mines the average daily product was 3 1-4 tons per diem, at wages ranging from 74 cents to \$2.40 per diem; average cost per ton, 65 3-4 cents.

The machine mines are said to have averaged 20 tons per diem per machine, at a cost ranging from 6 1-2 cents to 52 1-2 cents per ton, at wages from \$1.63 to \$2.50, or an average of \$2.40 per diem. Concluding, the commissioner states:

"In the machine mines the average number of days the miners were employed was 158; the average yearly income, \$337, and the average yearly expenses, \$332—showing an excess of income over expenses of \$5. In this it is seen that the annual earnings of



machine miners are \$96 in excess of the earnings of the pick miners, while the annual expenses are practically the same, the difference being only \$2.

"It is seen that pick miners, working 156 days, earn \$241; hence, had they worked full time, say 300 days, this income would have been \$463, and \$129 in excess of annual expenses; and if to this excess of income over the expenses the loss of 47 cents a day by screenage, could be added, excess of earnings over expenses would amount to \$270 a year.

"In the case of the machine miners, the showing would be still better. In working 158 days, their income was \$337, but had they worked full time, 300 days, their annual earnings would have amounted to \$639, or \$307 over annual expenses; and if to this loss by screenage could be added \$141, the excess of earnings over expenses would be \$448.

"Of the 674 miners representing the 73 mines, pick and machine, which have been tabulated, 191, or 28.33 per cent., owned the houses in which they lived, and those renting paid a monthly rent of about \$4.56, or an average annual rent of \$54.72.

"Of the 674 miners representing the 73 mines, pick and machine, 505 were married, having an aggregate of persons in their families of 2,538; or, practically five persons to the family.

"In summing up the matter, the question naturally arises: How do men receiving an income of \$241, or at best \$337, with an average of five persons to the family, manage to live? In answering the question, a miner said: 'They do not live; they simply exist;' and such an existence, it may be said, is a ceaseless struggle."

## THE CEREAL CROPS OF 1892.

Wheat.....	42,126,144 bushels, @	\$ 82.....	\$ 34,409,877
Corn.....	111,217,463 bushels, @	40.....	44,486,785
Oats.....	27,370,000 bushels, @	40.....	10,951,332
Potatoes.....	217,709 bushels, @	1 00.....	217,709
Tobacco.....	11,074,211 pounds, @	59½.....	663,898

The value of the entire crops is given as \$128,-809,494.

	NUMBER	VALUE	AVG. PRICE
Sheep .....	1,161,702	\$ 4,298,762 00	\$ 3 70
Hogs.....	2,586,380	12,781,061 00	4 94
Cows .....	657,048	15,276,366 00	23 25
Oxen and other cattle.....	1,085,236	20,025,520 00	19 28

	MORTGAGES		SATISFACTIONS	
	NUMBER	AMOUNT	NUMBER	AMOUNT
Real Estate .....	31,323	\$ 33,346,520 00	13,615	\$ 10,263,812 00
School Fund.....	11,859	813,914 00	721	278,251 00
Chattels .....	13,213	3,412,162 00	2,185	497,414 00
Mechanics' Liens.	2,978	479,090 00	903	98,926 00
Total.....	49,373	\$ 38,057,686 00	17,424	\$ 11,138,403 00

It is to be regretted that the report does not state how the mortgages were satisfied—whether by payment of money, or by sheriff's sale; but even if satisfaction was made by money payment, the increase of nearly twenty-seven millions of mortgage indebtedness is a sad fact, rendered more startling by the statement of the aggregate value of the farm products, to say nothing of the value of manufactures.

## NEW JERSEY.

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Social development and the functions of Bureaus of Labor Statistics. By C. H. Simmerman, Chief of Bureau of Labor Statistics, New Jersey.

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A marked tendency in modern society, both in thought and in action, is to care less for generalization, as conveyed by the term national, and to give more attention to specialization, as understood by the word individual. As national conveys the idea of aggregates, so individual conveys the idea of unit. And the broader, more humane conception of the real wealth of a nation is coming to depend more upon the limit of wealth possessed by the individual, rather than upon the amount forming the aggregate or total wealth of the country.

Adam Smith, the great authority in political economy, called his fundamental work the "Wealth of Nations." At that period, and until very recently, economists occupied themselves with the total production, exportations, importations and exchanges of nations. To-day the tendency is to inquire into the wealth of the units of the nation. to see if each individual has his primary wants satisfied. There is a disinclination to measure the wealth of a country by the total sum of its productions and exchanges, but inclination towards measuring its riches by the number of individuals who enjoy abundance in comparison with the number who are oppressed by poverty. This change in the point of observation by students of social problems requires that, before determining the wealth of a country, a door-to-door canvass shall be made, to inquire whether each of the inhabitants is in possession of the ordinary necessities of life; whether each child is properly fed and clothed, and if the morrow's meal is forthcoming.

The labor of the economist in the future will be directed to a study of the needs of each individual who composes the nation, and the best means of satisfying his wants. Heretofore they have been content to study wide aggregates, large sums, great results; now attention is directed to the individual, the units, of which the totals are composed. It is the application of that thought, formerly applied to "nonsentient things," which at present is applied to "sentient" man. It is the growth of the sentiment of humanity.

Charles Booth, the statistician of London, England, has indicated by his patient and persevering work the present trend of the economist. He gives as a result of his door-to-door visitations in the East End and southeast of London, that, of the five millions of inhabitants of that modern Babylon, one million and a half, or more than a quarter of the total population, do not earn more than eighteen English shillings per week for the family, and that during two, three and four months of the year, short time and want of employment reduces this amount very materially; and this in the richest city of the world.

Another evidence in the same direction was the count made recently by the authorities in New York city, to ascertain the number of the unemployed. The University settlements, which are so rapidly increasing in the midst of the most densely populated portions of our own large cities, are giving facilities for observation and study in the same direction; and the great attention which has been paid to the condition of the slums in all the over-crowded districts, both in Europe and in our own country, presents further proof of the tendency of economists to shift their point of observation. The rule has been to recognize only the wealth of nations; at present we are beginning to recognize the poverty existing as a problem to be considered.

While Adam Smith saw only the power and influence which her ever increasing exports and imports gave to the British nation, his disciples see the weakness and danger that lies in the fact that a vast army of her laborers is without work or food, and homeless, and that 40,000 children in its great metropolis go daily hungry to school.

There is a demand for more specific information concerning the lives of the masses of the people. It is observed that the estimated general wealth of the country is no criterion to judge the conditions under which a majority of its citizens live. Statistics which relate only to the general increase of wealth, without determining the amounts shared by each individual, are of little importance in the study of social conditions. For, look where we may, extreme poverty is greatest in communities where the greatest amount of wealth is centered.

This fact of increasing poverty side by side with increasing wealth indicates the true mission of the teachers of the science of social and political economy, which is, to show how the greatest number can be brought to enjoy the benefits of our present civilization, that by the application of scientific discoveries and ever increasing industrial progress, so far surpass all previous periods in the world's history as to allow of no possible comparison with the past.

The terms capital, rent, division of labor, banks, balance of trade, commercial treaties, association, co-operation, etc., in reality have no significance if they do not tend toward the increase of knowledge and happiness of the individual, which alone can secure to the state prosperity and peace. The insufficiency of the generally accepted theories of societary organization and the need of more accurate knowledge concerning the natural laws that underlie our social arrangement, is quite apparent to all who give the matter any attention. Let any who care to try the experiment, ask the first ten or fifty men they meet, irrespective of conditions in life, and note the

answers to queries concerning any one of the dominant questions of the day; money, tariff, cause of hard times, want of employment, etc., and they will be astonished to find how few there are who even claim to have made any study of causes at all. The confusion of ideas is even greater among the so-called educated classes than anywhere else.

The fact is that we find men in public life who have been taught in the same school, graduates from the same colleges and studied in the same books, acting in direct opposition to each other in all matters of public policy, and each justifying his actions by what is called sound principles of political economy.

About the only matter of agreement seems to be that it is the right of each individual to adopt whatever, in his own judgment, may seem to contribute most to his own interests, without any responsibility for its effect upon the collective well-being, which is theoretical anarchy, pure and simple. And as a result, we see practices justified publicly that, as individuals, the great body of society condemns.

This, we believe, would be remedied if the study of economic science were confined to ascertain facts, instead of mere opinions of the writers on the subjects. To illustrate: Why should statesmen differ about the effects of the tariff? If it promotes the interests of the greatest number, it ought to be demonstrable by some principle of political science. This controversy has been going on since the beginning of the government, and while the basis of conflicting opinions remain substantially the same, apparently the problem is no nearer a solution now than at the beginning.

On one side of the controversy it is contended that, owing to the fact that wages paid to labor are higher in this country than in Europe, without the protection given by duties on imports, wages and the general condition of workingmen in this country would decline to the level of foreign countries. On

the other side, the opponents of a tariff argue that the effects of a tariff are to restrict the employment of labor, and consequently is injurious. On one side it is said that the higher wages and better social conditions prevailing here tend to enhance the cost of production, while on the other side it is asserted with equal vehemence, that the higher wages paid here have a directly opposite effects—that the stimulus of high wages is to increase the efficiency of labor in an ever increasing ratio. For more than a hundred years this talk has been going on. Our representatives in Congress have spent months of their time yearly debating this question at the expense of the people. Great political parties have taken sides in the controversy; campaign orators, writers and newspapers have filled the country with literature on the subject; at times when changes in the rates was threatened, industry has been paralyzed and hundreds of thousands of workmen thrown out of employment, on the pretext that the intended legislation would be ruinous; while apparently during all these years of controversy it has never occurred to our statesmen that the points at issue between them were susceptible of demonstration by means of statistics. The same observation applies with equal force to the recurrence of panics, the unemployed, the centralization of wealth, the growth and power of monopolies; all these are matters of vital interest to the whole people, yet, the causes that produce them have not been made a matter of concerted investigation. In every day business the same confusion exists; we hear of supply and demand, of over production, of under consumption, the extravagance of the poor, fluctuations in the prices of commodities and wages. Any one of these pretended causes may be assumed by those interested in accounting for social and industrial defects with about equal propriety, so far as any scientific explanation of them is concerned. And the assertion is not infrequent, that production, consumption, consumption and exchange are mere matters of lottery.

When we consider that the organization of industry is substantially the same in all the leading commercial countries of the world, there ought not to be any great difficulty in determining the relative cost of production in units, if undertaken by government authority, under the supervision of competent men.

The United States government, by a census every ten years, approximately shows the aggregate yearly increase of wealth in the country. The necessity of knowing how it is distributed is quite as important. Without this no just estimate can be made of the practical working of our societary organization. It has been computed that 31,000 individuals possess \$36,000,000,000 of the total \$62,000,000,000, of the aggregate wealth as shown by the last census report. Whether this is true or false, there are at present no means of determining; but the fact that such a statement can go uncontradicted, is a just cause of alarm to all who desire to see government by the people perpetuated.

To the thoughtful mind the acknowledgement of an overproduction is susceptible of but one explanation—which is, that it is an evidence of mental stupidity on the part of those who are responsible for it, as well as an economic waste to society that permits it.

Within the past year we have experienced another great financial crisis, extending through all the great commercial countries of the world, in defiance of all the theories upon which our commercial activities are based. The effect of this has been to prostrate industry, bring distress to millions of people who have been thrown out of employment, and bankruptcy to thousands who have spent a lifetime in pursuits that are everywhere recognized as legitimate and beneficial to society at large.

Had an epidemic of cholera visited the country, the public would have immediately demanded the



enforcement of sanitary regulations to stamp it out; nor would there have been any differences of opinion among our learned sanitarians as to what should be done. Yet in remedies for relief from the distress caused by the panic, our statesmen appear as impotent as though there were no such thing as organized industry. The president of the United States imputed the cause to the silver purchasing act; but that act has been void for months, and the good predicted to come from its repeal has not appeared. Although at the last general election the people by a very large majority decided in favor of a reduction in the tariff rates, it is now contended by a large number of representatives that the mere proposition to carry out this expressed demand has destroyed the confidence of the people in the future.

Much more might be said in proof of the need for a better understanding of the laws that underlie our social organization. And while admitting that political economy may not be reduced to a positive science by which we can determine with mathematical precision the effects of the laws it treats of, it is contended that by analysis of the elements that contribute to the creation of wealth, we may determine, at least approximately, their relation to each other, and define the laws that control production, exchange and consumption. When these are understood, a scientific solution of the problem of the distribution of wealth is possible.

There is no doubt about the capacity of our productive forces to supply all the demand for the necessities of a comfortable subsistence for every man, woman and child in the country. The problem that has perplexed statesmen for the past generation is not that of production, but of consumption; or, how to find a market that will consume sufficient to keep our productive forces in activity.

Poverty, the distress from want of employment now existing, is not caused by there not being food

enough, clothing and houses to meet the demand; on the contrary, it is everywhere alleged that the hard times are due to an overabundance of these things. It is acknowledged the right of every man to have an opportunity to earn a living; yet there are millions of men in enforced idleness, who are willing and anxious to have work to do, but owing to some undefined cause they are deprived of this right to work. The fundamental principle underlying our government, and which shapes our political institutions, is the declaration "that all men are created equal; that they are endowed by their Creator with certain unalienable rights; that among these are life, liberty and the pursuit of happiness, and that to secure these rights governments are instituted among men."

The preamble to the constitution of the United States sets forth that its purpose is "to form a more perfect union, establish justice, insure domestic tranquillity, provide for the common defence, promote the general welfare," etc. These declarations constitute the basis of our political organization. Our political institutions are founded upon the equal rights of all men. Politically, "an injury to one is the concern of all;" but in our social and industrial organization it is quite different.

If one citizen is defrauded of his political rights by another, or by a foreign power, the whole of the moral, and, if need be, the military forces of the government are brought into action to redress the wrong. But the fact that a million of men are defrauded of the right to obtain a living does not concern those who have abundance. Our political institutions are altruistic; our social arrangements are founded on egoism. Politically our ideal is the greatest good to the greatest number; socially we are divided into a mass of warring atoms. Our political institutions are founded upon principles embodied in the constitution and laws of the country, defining the rights and duties of the citizen, and

made obligatory upon all men; while in our social and industrial organization these are left to the caprice of the individual, without any comprehensive system that insures order and harmony in the varied interests incident to our activities. Hence, we have class arrayed against class—those engaged in one kind of industry combined against those of another; while there are numerous organizations purporting to be formed for the only purpose of protecting their members from being spoiled by reason of their individual helplessness.

These considerations indicate the true purpose of a labor bureau, which is to study society, the relation of the individual members that compose it to each other, and give in detail whatever deductions the facts justify.

Labor bureaus had their origin in the aggressive labor movement just subsequent to the Civil war. The demand for their institution was first formulated by William H. Sylvis, at the session of the national labor congress held in Chicago in 1868, at which time a formal declaration of principles, or platform was adopted. He remarked that "We may formulate declarations, but they amount to no more than the declarations of other bodies of men, nothing more than our opinions. Facts are what we want. We want to base our demands on well-defined data, and until these are obtainable, no undisputable demands can be made. That labor is the most important of all material interests, that upon it all other interests hinged, and that, if there is any virtue in giving to any interest a separate and distinct department of government to protect and nourish it—and there certainly is—labor is the interest of all others entitled to that consideration." The demand for the establishment of a bureau was unanimously made a part of the platform. That was the beginning, since which, thirty-two states besides the

National government and six of the principle governments of Europe have instituted bureaus of labor statistics.

While they have not received all the financial assistance from legislators their importance justifies, they have very materially influenced the discussion of social problems.

The objects of a labor bureau are purely scientific; its purpose is to make a sociological investigation with a view, not merely to make an exposition of the present state of society, but to aid society in its upward progress.

The work of a labor bureau is essentially sociological; therefore, it differs from that of all other departments of government.

Its purpose is not the mere acquisition of knowledge, for sociology has for its object the good of the people. It is the business of a labor bureau to study society and explain the laws that underlie and govern social movements. It assumes that social movements are subject to general laws, and therefore, when understood, a solution of all questions affecting the general welfare is possible by scientific processes.

#### FREE PUBLIC EMPLOYMENT OFFICES.

At the ninth national convention of the officers of the U. S. Bureaus of Labor Statistics, held in this city, May 24, 1892, it was unanimously resolved that "the commissioners of labor of the different states recommend to the legislatures of their different states the consideration of the advisability of creating free public employment offices, under state control and supervision."

This recommendation was the result of an earnest discussion of the evils of private employment agencies.

Mr. J. R. Sovereign, the chief of the Iowa bureau, summed up the indictments against them in the following words:

"Some of the practices of private employment agencies are very inimical to the interests of the laboring people; they invariably receive applications for employment and fees for same, far in excess of their ability to supply situations; the advance fee of a poor, needy applicant is received with as much pleasure when the chances of securing a position are a thousand to one against the applicant, as under any other circumstances; they nearly always advertise for ten times as many laborers as are needed. They advertise for laborers and mechanics to go to the state of Washington or some other remote part of the country, under the vague promise that steady employment and good wages will be secured. In addition to the usual fee, the applicant must buy railroad tickets out of which the agencies receive additional commissions. It makes no difference whether there is any employment for them at the point of their destination or not; the railroads get their pay, the agencies get their fees and employers get a surplus of laborers, in consequence of which wages decline, many are unemployed, and thus trampism is superinduced through no fault of those honestly seeking employment."

"It was asserted, with much force, that the laboring man out of employment could receive no benefit from private agencies, however well they might be managed, unless he has money to pay for it.

"The laboring man who needs a situation most, is the man without a dollar. He must sell his labor, starve or go to jail. Nothing is a greater strain on the morals of a laboring man than to be out of employment and money at the same time. It is the first duty of government to make it easy for people to do right, and hard for them to do wrong."

The plea in behalf of public employment agencies was all the more favorably received by the rep-

representatives of the bureaus of labor statistics, because they were no new idea or untried experiment even in this country. Free public employment offices had been established in Ohio under the act of April 28, 1890, in the cities of Cincinnati, Cleveland, Columbus, Dayton and Toledo, under the general supervision of the commissioner of bureau of labor statistics and found very beneficial, both to employer and employe. They are intended to aid those seeking help or employment all over the state, without expense to the applicants. The respective municipalities pay for the salaries of those managing the several local employment agencies.

The act is an amendment of the law creating the office of the commissioner of the bureau of labor statistics of Ohio, and is as follows: Said commissioner is hereby authorized and directed, immediately after the passage of this act, to organize and establish in each city of the first class, and cities of the first and second grade of the second class in the state of Ohio, a free public employment office and shall appoint one superintendent for each of said offices to discharge the duties hereinafter set forth. Said superintendents shall cause to be posted in front of their said offices, on a sign board or in a suitable place on the building where such offices are located, the words "free public employment office." It shall be the duty of such superintendent to receive all applications for labor and record their names in a book kept for that purpose, designating opposite the name of each applicant, the character of employment or labor desired and the address of such applicant. Each of said superintendents shall be provided with such clerical assistance as in the judgment of the commissioner may appear necessary for properly conducting the duties of the several offices. No compensation or fee shall, directly or indirectly, be charged or received from any person seeking employment or any person or persons desiring to employ labor through any of said offices.

Said superintendent shall make a weekly report on Thursday of each week, to said commissioner of all persons desiring to employ labor and the class thereof, and all persons applying for employment through their respective offices, and the character of employment desired by each applicant; also of all persons securing employment through their respective offices and the character thereof, and a semi-annual report of the expense of maintaining such offices. Said commissioner shall cause to be printed weekly a list of all applicants and the character of employment desired by them and of those desiring to employ labor, and the class thereof, received by him from the respective offices aforesaid, and cause a true copy of such list on Monday of each week to be mailed to the superintendent of each of said offices in the state, which said list by the superintendent shall be posted immediately on the receipt thereof in a conspicuous place in his office, subject to the inspection of all persons desiring employment. Said superintendent shall perform such other duties in the collection of labor statistics as said commissioner shall determine. Any superintendent or clerk, as herein provided, who, directly or indirectly, charges or receives any compensation from any person whomsoever in securing employment or labor for any other person or persons as provided in this act shall be deemed guilty of a misdemeanor, and be fined in any sum not exceeding fifty dollars and imprisoned in the county jail or work house not exceeding thirty days.

The superintendent of each of said offices shall receive a salary to be fixed by the council of the city, payable monthly. The clerk or clerks required in any of such offices shall receive a salary of not more than fifty dollars per month; Provided, The compensation of such superintendents and clerks so appointed shall be paid out of the city treasury in which such free public employment office may be located.

### WOMAN'S WORK AND WAGES.

The report of the chief of the bureau of labor statistics of New Jersey for 1893, on this subject, is a very interesting document. He investigated 3,877 individual workers, of whom 3,119 were engaged in manufacturing and mechanical industries, and 758 as book-keepers, school teachers, clerks, domestic servants, etc. Eighty-two per cent. of the total number were born in the United States, 206 were born in Ireland, 154 in Great Britain, 144 in Germany, and 86 in Italy.

Their ages ranged as follows:

	Individuals.
Under 15 years.....	101
15 to 20 years.....	1,501
20 to 30 years.....	1,855
30 to 40 years.....	281
40 to 50 years.....	94
50 years and over.....	36

The average weekly hours of work was 63; domestics, 8 1-2 to 14; dressmakers, 6 1-2 to 13; saleswomen, 5 1-2 to 15; laundry workers, 8 to 14; all others, 8 to 13 hours; 3,124 began work at 7 a. m.; 2,879 quit work at from 6 to 7 p. m.

The clasified rates of wages were as follows:

	Persons.
Under \$3 per week.....	219
\$3 to \$4 per week.....	381
\$4 to \$5 per week.....	745
\$5 to \$6 per week.....	752
\$6 to \$7 per week.....	804
\$7 to \$8 per week.....	373
\$8 to \$10 per week.....	449
\$10 and over.....	154

The average number of days' employment during the year was 249, or 58 days' lost time, exclusive of Sundays and legal holidays.



This last time brings the average yearly earnings, for the whole number of working women reported, to \$265. The classified list shows that 979, or 25 per cent., received less than \$200; 2,582, or 67 per cent., under \$300; and 1,295, or 33 per cent., \$300, or over. The list is as follows:

## Persons.

Under \$100 per annum.....	109
\$100 to \$200 per annum.....	870
\$200 to \$300 per annum.....	1,603
\$300 to \$400 per annum.....	866
\$400 to \$500 per annum.....	327
\$500 and over per annum.....	102

The average income from all sources of the total number was \$266, and the average expenditures amounted to \$257; but as about 80 per cent. of the young women or about 1,280 persons lived "at home," and were partially supported by their parents or relatives, no exact data for estimating the social conditions are given, and we are left to conjecture as to the amount of suffering endured by those who had no other resource save the scant wages paid them.

## LABOR COMMISSIONER'S SUBJECTS OF INVESTIGATION FOR 1894.

## RANGE OF OFFICIAL DUTIES AND APPROPRIATIONS FOR CARRYING THEM OUT.

STATES.	SUBJECTS OF INVESTIGATION FOR 1894.	RANGE OF OFFICIAL DUTIES.	APPROPRIATIONS.
United States .....	The homes of workmen; city slums in New York, Philadelphia, Baltimore and Chicago; strikes and lockouts.	Labor and such other statistical information as may be assigned by Congress.	\$165,000 exclusive of appropriations for special inquiries assigned by Congress.
Massachusetts .....	Unemployment and the distribution of wealth.	Labor and the statistics of manufactures, also a decennial census.	\$17,300. Printing, postage, etc., not included.
Pennsylvania .....	Building and loan associations; strikes and lockouts, unemployment, sweating system, apprenticeships, industrial schools.	Labor and the statistics of manufactures.	\$9,000. Printing and commissioner's salary not included.
Connecticut .....	Building and loan associations; manual training schools.	Labor and the statistics of manufactures.	\$10,000 exclusive of printing.
Missouri .....	Building and loan associations; cost of maintaining criminals.	Labor and the statistics of manufactures, mine and factory inspection.	\$19,400 for all purposes.
New Jersey .....	The industrial depression.	Labor and the statistics of manufactures.	\$8,200 exclusive of printing and stationery.

Illinois.....	Unjust discrimination in assessing for taxation; listing land values and improvements separately; street car and gas companies.	Labor and the statistics of manufactures, mine inspection.	\$16,000 exclusive of printing and secretary's salary.
New York.....	Tabulation of inhabitants by occupation, trades, callings, age and nationality.	Labor and the statistics of manufactures. Regulations regarding marking of prison made goods.	\$95,000 exclusive of printing annual reports, expressage and postage.
California.....	Comparative statement of industrial conditions, 1892-1893; strikes, boycotts and lock-outs.	Labor and the statistics of production. Factory inspection.	\$4,400 exclusive of printing and commissioner's salary.
Michigan.....	Agricultural laborers.	Labor and the statistics of production. Factory inspection.	\$15,500 exclusive of printing.
Maryland.....	Sweating system, tenement houses and child labor in Baltimore; digest of census report on Maryland.	Labor and the statistics of production.	\$5,000 exclusive of printing.
Rhode Island.....	Rate of wages, hours of labor and home conditions of textile employees.	Labor and manufacture statistics. Factory inspection.	\$5,000 exclusive of printing.
Maine.....	Unemployment, industrial depression, reduction of wages, etc.	Labor and the statistics of manufactures.	\$3,500 for salaries. Expenses paid out of biennial appropriation.

## LABOR COMMISSIONER'S SUBJECTS OF INVESTIGATION FOR 1894—Continued.

## RANGE OF OFFICIAL DUTIES AND APPROPRIATIONS FOR CARRYING THEM OUT.

STATES.	SUBJECTS OF INVESTIGATION FOR 1894.	RANGE OF OFFICIAL DUTIES.	APPROPRIATIONS.
Minnesota.....	Foreclosures of mortgages and redemptions of city lots; number and amount of mortgages placed on record, 1867 to 1893; chattel mortgages and usury in the city of Minneapolis; margin of profit in exporting wheat to foreign countries; flour mill industry; accident insurance.	Statistics. Factory inspection and the enforcement of all labor laws.	\$12,200 exclusive of stationery and printing. Seven salaried officers in bureau, exclusive of clerks.
New Hampshire.....	Unemployment, strikes, general condition of workmen outside the building trades; manufacturing statistics.	No particular duties assigned.	Salaries not stated. No appropriation direct; all bills are audited by a board.
West Virginia.....	Farm, lumber and coal statistics.	Labor and statistics of production.	\$2,400 exclusive of printing.
Indiana .....	Women wage earners of Indianapolis; investigation in eight cities concerning servant girls; economic and criminal statistics of the State.	Labor and statistics of manufactures.	\$9,000 exclusive of printing.

Ohio .....	Manufacturing—1892 and 1893 compared; child labor; condition of labor at lake ports and on the lake; employment agencies report.	Labor and statistics of manufactures. State employment bureau.	\$2,000 for salary and \$500 for traveling expense of commissioner. Other expenses met out of general fund, except salaries of superintendent and clerks of employment agencies which are paid by cities where they are established.
Iowa .....	Present condition of wage earners; advantages of various localities in the State for the establishment of manufactories.	Labor and statistics of manufactures and "booming" the State.	\$1,000 for salaries. Other expenses paid by appropriation bills.
Kansas .....	Report on farming, mining and convict labor; report on State Agricultural College.	Labor and statistics of agriculture and manufactures.	\$5,000 exclusive of printing.
Kentucky .....	Agricultural statistics.	Labor and statistics of agriculture.	\$13,000 for everything.
Tennessee .....	Coal mines and manufacturing industries.	Labor and mine inspection.	\$7,000 for salaries and all expenses.
Montana .....	Labor organizations—wages, lost time, sanitary conditions of home and shop; agricultural and stock raising statistics.	Immigration bureau. Labor and the statistics of production. Decennial census.	\$6,000 exclusive of printing.
Nebraska .....	Mortgage record by counties, 1893-94; manufactures; building and loan associations; rate of wages; social conditions in representative establishments; beet sugar statistics; irrigation, etc.	Labor and the statistics of production.	\$3,500 exclusive of printing.

## LABOR COMMISSIONER'S SUBJECTS OF INVESTIGATION FOR 1894—Concluded.

## RANGE OF OFFICIAL DUTIES AND APPROPRIATIONS FOR CARRYING THEM OUT.

STATES.	SUBJECTS OF INVESTIGATION FOR 1894.	RANGE OF OFFICIAL DUTIES.	APPROPRIATIONS.
North Carolina .....	Condition of labor.	Labor and the statistics of manufacture.	\$3,500 for salary and expenses.
North Dakota .....	Cost of producing wheat, 1890 to 1893; agricultural and manufacturing statistics.	Labor and the statistics of production.	\$5,725. Expenses not limited; but bills must meet the approval of a committee of State officers.
South Dakota .....	Manufacturing statistics—number of employees, social conditions, etc.	Labor and the statistics of production.	\$1,450 for expenses. Salaries not stated.
Texas .....	Agricultural statistics; real estate and chattel mortgages; farm owners, tenants and laborers.	Bureau of agriculture. Insurance, statistics and history of Texas.	Not given.

In addition to the above proposed lines of investigation the Tenth National Convention of Officers of Bureaus of Labor Statistics adopted the following resolutions with a view to tabulating the results obtained if their recommendations should be adopted:

WHEREAS, The subject of taxation is one of the most vital topics for present day discussion, and Whereas, A just and equitable system is deniable from every point of view, all the individuals of the community being interested in securing such a system; therefore, be it

Resolved, That this convention considers it expedient that individual states should make an inquiry to show—First—The value of land exclusive of improvements. Second—The total amount of taxation now levied within each district where the value of land is ascertained Third—The probable rate of such taxation which would be levied upon the land only. Fourth—A classification of values, the classification to show land, improvements of different kinds, railroad values, exempted property, and all other properties separately.

## German Method of Dealing with the Tramp Question.

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The following excerpts from the New Review are valuable as an illustration of a new departure from old methods in dealing with the "tramp question," and the lack of employment among artisans and laborers. The initiative was taken by Pastor Von Bodelschwingh, of Bielefeld, a small manufacturing town of 40,000 inhabitants, in the Prussian province of Westphalia. The great number of tramps seeking alms and shelter, and the crowd of honest workmen scattered throughout Westphalia vainly seeking employment, had for years attracted the attention of the Bielefeld pastor. He soon discovered—what economic investigators the world over have found in dealing with the question of vagabondage—that there are three elements to be considered, and that the matter easily resolved itself into a problem dealing with the following distinct aspects of poverty:

First—The lusty vagabond to the manor born, who works only under compulsion.

Second—The large class of artisans and laborers who will work if work is to be had, but who will beg rather than starve.

Third—The smaller class of spirited, independent men, who will starve rather than beg when employment is unobtainable.

It was to aid the last two classes of his fellow-citizens that the labor colonies and wayside boarding houses were, mainly by his efforts, established throughout the greater part of the German Empire. By the aid of these agencies men who are willing to work may make a tour of the whole country in search of employment, or seek a refuge in the nearest colony when other means of support have failed. The solution given seems to be no less economically sound than eminently practicable, being founded on the solid ground of a service for a service; or clothing, food, shelter, and a small stipend, given in exchange for honest labor.

There is nothing eleemosynary connected with these institutions, the intention being to make them self-sustaining by the labor of the beneficiaries. Most of the boarding houses and some of the colonies are already placed upon this footing.

We cannot but regard these experiments as having great practical value for those who, seeing the anxiety and distress often occasioned by lack of employment, stand ready to lend a helping hand, but know not where or how to proceed. The custom of indiscriminate alms-giving as a means of relieving the distressed is a bad one in whatever way we view it. So far from being a commendable action, it should be styled, what it really is—a system to promote mendicancy. Sentimentalism and fashionable fads of charity organizations should have no place in serious economic movements.

Rickling is only about forty-two miles northeast of Hamburg, but, being on a branch line, the journey to it is a slow one. One of my Hamburg friends kindly agreed to go with me, and in order to have a whole day before us we went in the evening to the junction—Oldesloe—a small station about twenty-four miles on the way to Lubeck. Next morning we were up betimes, and at 6 o'clock we left for Rickling, arriving shortly after 7. Half a mile's walk from the station brought us to the buildings of the



Holstein labor colony, over which we were shown by Herr Marcquardt, the comptroller of the provincial government, in the absence of the director.

Besides the eating, sleeping, working and recreation rooms for the colonists and the officials, there are commodious buildings for the horses, cows, pigs, etc., of which there is a large stock. The inmates average about 150 to 160 men—more in winter and fewer in summer—and those we saw were quite equal in physique to the average men throughout the country. Some of them are, of course, pretty well run down when they seek admission, but the diet, regular hours and healthy labor soon restore them to fitness.

The management consists of a director, two foremen, three agricultural overseers and an accountant, and under their supervision the men do all the work of the colony. The colonists are drawn from all classes of society, there being present in the place broken-down lawyers, doctors, and even clergymen, government officials and shopkeepers, the majority naturally being of the working class. Not a few have been in prison; but when ex-convicts join it would seem as if they resolve to turn over a new leaf, for many of them do well. No questions are asked of a man wanting admission except as to his freedom from infectious disease. He is admitted if there is room, and it rarely happens that anyone has to be turned away. The applicant has to undertake to remain four months, so that, after being made fit at the expense of the colony, the colony may in turn be benefited by his labor. During his stay his antecedents are quietly ascertained, and his friends are communicated with in case of need, but no previous misconduct is allowed to affect his treatment. He gets a fair chance. The men remain for variable periods, but must leave at the end of two years, as otherwise they would become domiciled and the parish would become liable for their maintenance when they cease to be able to earn their living.

Herr Marcquardt showed the buildings and stock with evident pleasure, and well might he be proud of them; but it was the farm work that interested us most. For miles around, the country is mere moorland, peat moss and bog, and seven years ago Rickling estate was no exception. It consists of 1,100 or 1,200 acres, and the parts not yet reclaimed and in course of reclamation, remind us of Flanders Moss, near Buchlyrie. The appearance was exactly the same, the peat being from ten to twenty feet deep, with wet patches here and there. Unpromising as it looks, however, large tracts have been brought under cultivation. Reclamation work is done in winter as far as possible, finished up during the odd spare time in spring and summer, and by autumn the land is ready. Rye is usually sown then and a good crop is borne the following season.

The chief crops are rye, oats, potatoes, mangolds, turnips, beans and peas, and a little wheat. There is also excellent pasture, and a number of pine trees have been planted and are thriving.

I said that applicants have to sign a four months' contract on entering. No wages are payable as such, but a small bonus is put to the men's credit, and paid over to them when they leave. No beer or alcoholic drink in any form is allowed, drink having been as usual everywhere, the cause of bringing most of the men down. But those who like may have tobacco, the cost of it being deducted from their bonus when they leave.

The colonists are very far from having an easy life of it. Their working day is from 5 o'clock in the morning in the summer, and 6 o'clock in winter, until 7 o'clock at night, breakfast being served from 8 to 8:30, dinner from 12 to 1, tea from 4 till 4:30, and supper at 7. The food is abundant, but very plain, rye bread forming the staple. Very few leave, however, without fulfilling their four months. If anyone does run away, and the bonus at his credit is insufficient to pay for his clothing or boots he has on belonging

to the colony, he is, of course, liable to arrest for theft. He can easily be caught, being pretty sure to go to one of the other colonies; but cases of prosecution are altogether exceptional. Many of the men after a few months' sojourn are able to get employment outside at fair wages; others, less self-reliant, but capable enough while under discipline and sure of their daily needs, stay on, until by the rules they must leave. Some of these simply stay out of the parish for a few weeks, so as not to become domiciled, and then return; or they go on by means of the *verpflegungs-stationen*, or roadside boarding houses, to the next colony. In either case there seems to be a clear gain to society, as the men are at least striving to pay their way.

What are the financial results? This is a very difficult question. The colony has considerable outlays for management and tools, for the sand and lime required on the land, none being found on the estate, unfortunately, and for necessities which it cannot produce. Herr Marcqardt stated these roughly at \$10,000. The required revenue is derived from three sources: First—Grants from the provincial government, those from last year amounting to about \$6,000 to \$7,000. Second—Voluntary subsidies from the large towns, whose natives take advantage of the colonies; Hamburg, for instance, paying \$1,500; Lubeck and Kiel paying smaller amounts. Third—Private donations through the *Missions Verein*, under whose auspices the colony was established and is carried on, subject to the supervision of a comptroller appointed by the provincial government. Apparently, therefore, it costs about \$10,000 a year at Rickling to benefit some 150 men. But it would be a great mistake to draw any such conclusion. The land of the colony was bought originally for \$20,700, and is now valued at \$90,000, so that the increase in value is nearly, if not quite, equal to the expenditure. Bearing in mind the large amount which, but for the colony, would have had to be spent on these men,

either as paupers or criminals, and the fact that they are rapidly converting a dismal swamp into fertile, food-producing land, I think the Holstein labor colony may well be pronounced a great success.

Our next visit was to the Corrections-Anstalt, about seven miles from Hamburg. This being a sort of penitentiary establishment, details need not be given.

Dr. Fohring and Dr. Hasche had both told us that they believed the men were being reformed in the free colonies, but their long experience went to show that no reformation was ever effected in the penal ones. All that these were good for was the elimination from society for a time of habitual pests. We hoped the director might have a tale less sad to tell, and questioned him closely as to the results from a reformatory point of view. "Practically nil," was the answer.

From hospitable Hamburg we made our way to Hanover and thence by an early morning train to Bielefeld.

This busy little manufacturing town, with its 30,000 inhabitants, is about seventy miles from Hanover, on the main line to Cologne. We reached it shortly after 8 o'clock, and at once sent our cards and letter of introduction to Pastor Von Bodelschwingh, with a request that he would favor us with an interview. Our messenger brought back word that we should be welcome to come at once. We found his house on a slope of a hill at the outskirts of the town. He may be called the founder of the free labor colonies of Germany, and it was interesting to hear from his own lips how the idea originated. Before the foundation, ten years ago, of the labor colony of Wilhelmshof, Bielefeld was infested with beggars. From twenty to thirty would call on him in a forenoon, most of them sturdy, able-bodied fellows, but all with the same pitiful story—they wanted food, and would be glad to work for it, but they could not get work.

Well, as already stated, the pastor's house is on a hillside; the road to it has been cut out of the slope, and is so steep as to be practically impassible for vehicles. To the right the land has been leveled for building, but to the left it rises abruptly, and in former times portions of it slipped occasionally and blocked the road. It occurred to Herr Von B. that a rough and ready retaining wall would be of great use, and that the building of it would give employment, for some time at least, to the twenty or thirty hungry visitors who called on him daily. From that day forward, whenever a man came to beg he was offered work at the wall, and got as much as he could eat and a night's lodging in exchange for his labor.

In a few days the average number of daily beggars had fallen to two or three, and these worked willingly. The others, who did not really want to work, disappeared. But an altogether new class of men now turned up—hungry fellows, who had never come to beg, but who now came to work—if food was to be had for the working.

From these experiences the conclusion was drawn that there are three classes among the very poor—those who like to beg and will not work, of whom at first the proportion seemed considerable; those who will beg rather than starve, but who will rather work than beg, if work be forthcoming; those who will starve rather than beg, but who will work for a mere subsistence if work is obtainable. Pastor Von Bodelschwingh at once set himself to work out a plan for dealing with the problem. He began by laying down for his guidance the following principles: First—That if a man is willing to work, work ought to be found for him, and he ought to be sure of food and shelter, at least, in exchange. Second—That work ought to be had, and the remuneration relatively low, so that the man may have every inducement to search for employment in the ordinary way. Third—That almsgiving should cease save in very exceptional circumstances. To give effect to his ideas,

he asked his countrymen to join in establishing: First, labor colonies; second, boarding stations, or inns, for laborers on the tramp; and third, a league against house-to-house begging.

Sufficient funds for a beginning were soon subscribed, and on March 22, 1882, the labor colony of Wilhelmsdorf was opened. Since then the system has become so popular throughout Germany that some twenty-five colonies have been created, and there are now boarding stations on all the principal highways, to enable tramps to work their way from any given point to a colony, or from town to town in search of employment.

The twenty-five labor colonies are independent of each other, but are represented on the central committee in Berlin, of which Count Zeithen is chairman. Meetings are held periodically, at which the latest improvements in equipments and administration are compared and discussed. In this way healthy emulation and freedom of initiative are retained, while practical identity is secured. The colonies are intended to enable men out of employment to earn food and shelter for more or less lengthy periods. Experience shows that they are apt to be crowded in winter, while the inmates are fewer in summer, as they find remunerative out-of-door work readily. Herr Bodelschwingh told us proudly that in 1890 not a single Westphalian had to be told in Westphalia that there was no work for him, summer or winter. Work had been found for all strangers in the summer, but for a few of them it had been impossible to provide in winter. The boarding houses are very numerous, there being already about 400 managed by the Herbergs Verein, and about 600 others more or less similar. The aim is to have such inns on all the main thoroughfares, at distances of ten or twelve miles apart, where for four or five hours' work a day's food and a night's lodging may be had. The plan has been so far carried out that, practically speaking, a man can work his way from one point of the country

to another, and, in fact, may make a tour around the empire. Between working and walking he is expected to do nine hours a day, so that if his tramp has required five hours, he is let off with four hours' work. The men are recommended to work in the forenoons and wander in the afternoons; but this is not compulsory. The boarding stations, also, although more or less independent, are under a central committee in Berlin, so they are practically the same throughout the country, both as regards equipment and administration. They can accommodate from twenty to sixty travelers, and in some of the larger centers they can take in 100. The guests may either earn their supper, bed and breakfast by their labor, or they may purchase them for 12 cents, and may have dinner, too, for 8 cents more; and even less in the smaller places.

In each Herberge is hung up a copy of the regulations, with a map in the center showing the principal roads to the important places within walking distance. As already said, the men are expected to work in the mornings and wander in the afternoons. The work almost always consists of wood-chopping, but agriculture was being added on a small scale in the country places, with a view to being able to provide for all comers in winter. No man fit to go on is entitled to remain more than one night in an inn; but in the winter, when the colonies are crowded, the regulations are relaxed; the current flows more slowly, so to speak, and this makes it possible to accommodate almost all applicants.

We come now to the third item in the pastor's programme—a league to put down begging. He got the union against house begging formed, and I suppose that everybody who is anybody in Bielefeld, and doubtless throughout Westphalia, belongs to it. Anyhow, we saw the small metal ticket denoting membership stuck as a warning to beggars, on all the doors at which we stopped at Bielefeld. Members pay a small subscription, to be spent in the organized char-

ity above described; but no beggar need ask for alms at a door bearing the union's badge. In our party was a wealthy Hamburg merchant, and, fortunately for me, it was he who put the final question, just then on my lips: "How does it pay?" Up got the pastor, his eyes flashing, and putting his hands on the questioner's shoulders, he said: "Ah! my friend, you are cursed with the commercial spirit—the everlasting business. Don't you know that there are things that you cannot estimate in money? Look what has been done all over Germany! Austria is copying us. England and France, they say, are about to follow. But what has Hamburg done? Nothing. You wait to see if it pays! You Hamburgers have much to answer for. Poor country boys all over Germany look to your fine city on the Elbe as another El Dorado. If they could only get there! They work their way, beg their way, tramp and starve their way; and when they get there what do you do for them? Down they go into the gulf!"

"But," remonstrated my friend, "do you forget that Hamburg gives 15,000,000 marks a year for charitable purposes? Is not that far more than her share?"

"There you are again," was the retort; "always a true Hamburger, valuing everything in money. What we want is personal help and interest in our work. But, after all, how does it pay? Well even a Hamburger must admit that we can show good results. You know the town of Lippe-Detmold, with its 100,000 inhabitants? It was calculated that in 1880 it gave at least \$24,500 a year to street beggars. Now its share of contributions for the Herbergen is only some \$750 a year; and even this is rather higher than the proportion of the whole province. The population of Westphalia is 2,200,000, and its contributions are now \$13,650 a year, or a little over half what Lippe-Detmold used to pay for one-half of the population. Rickling labor colony is almost self-supporting, and bids fair to be entirely so very soon; and Dusseldorf-



Holzthal has actually shown a large profit. But, my friends," he added, "these two are exceptionally fortunate. For me, the actual cash result is nothing; at least it is quite secondary. There has been a great saving of taxation, voluntary and involuntary; indiscriminate alms-giving, with all its attendant demoralization, both to giver and receiver, has been almost stopped, and if you inquire of people in this neighborhood when they last saw a beggar, they will tell you they do not remember, or that weeks pass without anyone asking them for alms. And what far outweighs all this to my mind, is the moral elevation of our people, which we have undoubtedly achieved, and the number of men we have saved from vice and crime. These are the priceless victories for which I thank the dear God; and if we add to them the reclamation of miles of waste land, so that we may be said to have 'the desert to blossom as the rose,' I think there is no need to ask, 'How does it pay?'"

It was impossible not to feel thrilled by his fine enthusiasm, and we would gladly have waited to hear more of his inspiring words, but time was flying and we were compelled to drive off to see the first German labor colony at Wilhelmsdorf.

As we neared that city we noticed that the soil was little else than sand. In fact, we had come upon the great central sand plain of Germany. In most places the sand is overgrown with a light coating of heath and brushwood, with small fir trees here and there. Other parts we found carefully planted with pine trees at equal distances from one another, and at various stages of growth. Further on the land was under cultivation, or in process of being brought under spade. The staple crop, as usual, is rye; but peas, cabbage, turnips and grass are extensively raised. The grass is of special excellence, three good crops a year being got by a system of irrigation. There is also an extensive market garden where fruit and vegetables are grown, both for the use of the col-

onists and for the market; and in the buildings we found a large stock of cattle, horses, poultry and pigs. Far more pigs are reared than can be eaten by the colonists; indeed, a good part of the produce of all sorts is sold and other produce more suitable for their wants purchased with the proceeds. The men themselves who had been in the place for any length of time appeared to us quite up to the average standard of laborers, and when we questioned Herr Weller as to whether he was not troubled with inefficient applicants, he replied that the tramps who were not able to work, and did not mean to work, knew better than to apply at a labor colony. Of course, applicants sometimes came who were run down; but usually a few days of regular hours and healthy diet set them up again; if not, they were handed over to some establishment for invalids. The usual contract at Wilhelmsdorf is a six weeks' one, for the first fortnight of which no wages are paid; for the next four weeks, which no wages are paid; for the next four weeks, five to seven cents per diem are put to the men's credit by way of a bonus, and this is usually applied by them to the purchase of clothing from the colony store. Those who leave before the six weeks are up get no certificate of character. As this certificate is of great use in the getting of situations, the men very rarely risk losing it. Many, on the contrary, stay for much longer periods than six weeks. At the time of our visit the number of men on the farm was over 120. It is fullest in winter, when it has frequently 200 inmates; and in summer the numbers fall as low sometimes as 75. The cost of maintenance per man seems to be a little more than at Rickling—nearly 22 cents per diem, and about 5 cents on the average for bonuses; i. e., about 27 cents. Our guide told us that almost all the men who came had been brought down through drink. While in the place they worked well and gave no trouble, and many of them upon leaving got into good situations as gardeners or farm hands. In the early days of the insti-

tution men came who, finding the work hard and regularity irksome, left after a few days, but now that sort of thing was practically unknown.

It only remains for me to refer to Belgium, and it calls for little special remark in so far as its existing labor colonies are concerned. They are all of a more or less penal character, so that the Hamburg one may stand for the type. But we find public opinion on the whole question of vagrancy much advanced. Indeed, a parliamentary commission, which has been studying it for some time, has just issued its report, of which the main recommendations were: First—Prolonged confinement and rigorous punishment of vicious and incorrigible idlers. Second—Moral and material help of the unfortunate and infirm in houses of refuge. Third—Training and educating the young. A bill embodying these was introduced into the house of representatives, and after numerous debates there and in the senate, was passed last November, became a law on the first of January, 1892. It gives the courts power to sentence vicious idlers to confinement for periods of not less than two years, and not more than seven years, during which they will be compelled to work regularly, and will be under severe discipline. A small wage will be allowed, and they will be enabled to lighten their lot, and obtain earlier liberation by being thrifty and laborious. The houses of refuge will be charitable establishments rather than penitentiaries. Able-bodied inmates will, of course, have to work to preserve themselves from the demoralization of idleness and to procure their subsistence, but the rigors of detention will be lightened as far as possible. There will no longer be any imprisonment, nor even sentence in the criminal sense, for mere vagrancy or begging. The act of 1886 prescribed a short term of imprisonment, not exceeding fifteen days, before confinement in the depots of mendicity. This the government now holds was indefensible, because, in cases of misfortune, it was cruel, and of deliberate laziness absurdly

inadequate. The committee recommended that the expenses connected with the new system should be borne by the entire state, and not, as previously, by each commune; the government recognizing the unfairness of imposing upon one commune, because a beggar was born or had resided in it, the cost of measures adopted with regard to him in the interest of the whole kingdom. This was agreed to by the Chambers in regard to all under 18 years of age, but for adults the cost is to be shared by the state, the commune of domicile, and the province in which the commune lies.

To sum up the conclusions to be drawn from the experiments made in the countries referred to, seem to be that a certain number of vagrants and beggars are to the manor born; that they cannot be reformed; and that the only way to deal with them is to confine them, and that not merely for short periods of a few months, in such establishments as compulsory labor colonies. It is not in the nature of things that these should be self-supporting.

The more I have thought over the various problems referred to, the more has the conviction been borne in upon me that such work as providing refuges for the young, the infirm and the aged, and the creation of town work-shops, and farm colonies for municipalities and local authorities, instead of being left to private philanthropy. Paris, as usual, is setting a praiseworthy example. She has long had her municipal hospitals and industrial colonies for vagrants, partly penal and partly voluntary. Now, an agricultural colony for juvenile delinquents is being established, and the municipal council is about to open a free agricultural labor colony near Paris.

Surely there could not be a better field for emulation among our great municipalities than studying practically how best to deal with these classes. Thrift is a virtue too frequently conspicuous by its absence among the laboring classes; but, however thrifty they may be, it is self-evident that many of

them cannot possibly save out of their scanty earnings a sufficient provision for sickness and old age. They simply rely on their children; in some instances these are indifferent, but in most they are overburdened with the upbringing of their own families. Nothing is left but recourse to parochial relief or private charity, involving in either case enormous material loss to the helpers in cost of administration, imposition and overlapping, apart altogether from the moral loss to the helped.

Several of the people we met were of opinion that before long many continental states will admit the principle that every citizen who has worked faithfully for his living, in whatever capacity, up to the age of 60 or 65, has earned a pension quite as much as any soldier or civil servant, and ought to get it as a right.

In many states a system of insurance is already in existence, and our late government intended to introduce something similar at the instance of Mr. Chamberlain."

In addition to the comments of the New Review, it seems not inappropriate to add: That while the foregoing subject has been handled from a point of view which presents the question of poverty as an unavoidable condition for which adequate and permanent measures for amelioration have been inaugurated; and while there is no reference to the causes of poverty save to allege that intemperance is one of them, it is not assumed that the measures adopted are designed to do more than alleviate the sufferings of the impoverished, and no suggestions are made as to a remedy designed to dry up the stream at its fountain head. While I am in entire sympathy with the methods as detailed, for the relief of the distressed and believe with the writer that there is a good field for emulation among our municipalities, in studying practically how best to deal with the idle classes, I am of the opinion that

there is a far better and more urgent field for emulation in studying the causes which produce involuntary poverty, the best methods for removing them and, when found, of applying these methods with vigorous alacrity. Why is it that so much valuable time and large amounts of wealth are bestowed in dealing with the result—poverty—and so little heed paid to those who present schemes for the removal of the cause? It seems to me there are two reasons. One—that which the correspondent of the *New Review* seems to have—is, that poverty arises from causes beyond the control of legislation, partly from a want of thrift among the producers of wealth, and partly as the results of social laws and customs that have somehow engendered a spirit of fierce competition among the laborers, which impels them to sell their labor for the lowest sum upon which they can subsist and reproduce their kind. Another class see in poverty the hand of God imposing upon them the exercise of Christian virtues, for the relief of the poor and their salvation from the effects of vice and crime into which the poverty ordained of God has led them. Still another class, more intelligent, more bold and unscrupulous, who know that labor produces all wealth, realize that by unjust laws they have been permitted through the chicanery and cunning frauds, or armed force of past generations to reap where they have not sown, and to gather into their storehouses the fruits of the labor of others, are now unwilling to listen to the decree of Justice, who demands that they shall give up their special privileges, get off the backs of the producers and earn their bread through the sweat of their own brows. Some inkling of the injustice of our present social relations must have entered the minds of the men quoted as favoring a pension to workingmen after 40 or 50 years of unremitting unpaid toil has broken them down in body and mind, thus rendering them of no further use to

their masters or to themselves. Truly, they should receive as much consideration as their master's horse or dog, and I doubt not the measure will meet with the approval of all classes. Even the privileged classes can be induced to do anything which permits their keeping on the backs of the working people. They will even gracefully dismount from the old drudge of 65 and pay him a small bonus for the ride, provided a fresh mount is secured to them and their children forever. To quote the venerable pastor of Bielefeld, "Like all the rest, we are cursed with the commercial spirit." We do not seem to know that there is anything which cannot be estimated in money. This question of poverty can never be adjusted until it is settled right, and that will be when equal access to natural opportunities is the recognized right of each one of God's children. This can be brought about upon the lines of least resistance through the operation of the single tax.

## Royalties.

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*From the Tenth Annual Report of Commissioner Robinson of Michigan.*

What are royalties, and why should they find a place in this report? Royalties are certain charges upon natural materials which have been monopolized by an assumed or legalized ownership of the earth, thus excluding the free use of such natural opportunities, and permitting the holders to charge a per cent. of the product for the privilege of production—such as a price per ton for coal and iron ores, a certain per cent. of the market value of the product of silver, gold and lead mines; or a certain price per thousand for the lumber product of a forest.

It acts as a tax upon labor and capital, because royalties are diverted from the public treasury, where they should go, into the coffers of the corporations or private individuals to whom it does not belong. Such payments restrict production and affect the laborer. Royalties therefore, are a proper subject for investigation by a labor bureau, as much as are rents, interest and taxation.

Here is a source of revenue worthy the attention of the legislative bodies of the nation and of the state. What will be the effect of a tax on royalties? Can it be made to yield a legitimate revenue for the necessary expenses of government, and that without burdening either capital or labor? Should not all royalties be paid to the state instead of to the individual? What is the extent of the royalties



now annually paid by consumers to the owners of coal, iron, gold and silver mines and forests, are proper subjects for investigation by this bureau and for the earnest consideration, and legal action of the legislature of this state. While no statistical data regarding the royalties paid in this state exist, the United States Labor Bureau has investigated the royalties on the iron mines of Michigan, Pennsylvania, Ohio, Alabama and New York; the coal mines of Michigan, Ohio, Illinois, Alabama, Pennsylvania and Maryland and the stumpage of the pine lands of Michigan, Wisconsin and Minnesota.

These are the principal sources of the iron, coal and timber of the United States, and these figures will enable the legislature to obtain a fair idea of the immensity of the resources of the country and the ease with which any needed revenue can be obtained therefrom. It should also prepare the Colorado legislator for a statement of the immense royalty sums paid in our state to the owners of gold, silver, lead and copper mines and quarries and the owners of many other natural sources of wealth that have come into use as population has increased, as civilization has advanced and as science has discovered economic methods of utilizing the wealth in Nature's store-house. And, when it is kept in mind that these royalties are no aids in the production of wealth and that their absorption by the government would not prevent the production of a ton less of iron or coal, or an ounce less of silver or gold or of any other form of wealth, the importance of this investigation becomes apparent. The aggregate royalties and stumpage paid to the owners of iron and coal mines and of timber lands in 1889 in the United States were:

Timber stumpage.....	\$ 421,245,680 00
Coal royalties .....	21,336,931 00
Iron ore royalties.....	8,614,985 00
Total royalties .....	<u>\$ 451,197,596 00</u>

The total value of the timber product was \$907,620,000. The total labor cost, including interest on active capital was \$424,766,160. This shows that the stumpage paid by the consumers of timber to the owners of timber land in that year was \$421,245,680, which is 64.4 per cent. of its market value, and there is still a profit remaining to capital of \$61,608,160. The total value of the product of the timber lands and the coal and iron mines of the United States for the census year was:

Timber .....	\$ 907,620,000 00
Coal.....	160,226,323 00
Iron.....	33,351,978 00

This product was distributed to labor, capital and royalties as follows:

#### TIMBER.

To labor, for wages and all other expenses of production .....	\$ 424,766,160 00
To capital as profit .....	61,608,160 00
To land owners as royalty, 46% .....	421,245,680 00
Total .....	<u>\$ 907,620,000 00</u>

#### COAL.

To labor for wages .....	\$ 109,130,928 00
To all other expenses .....	18,828,590 00
To capital as profit, 15 cents per ton or 13% .....	10,929,874 00
To land owners as royalty .....	21,336,931 00
Total .....	<u>\$ 160,226,323 00</u>

#### IRON.

To labor, for wages and all other expenses .....	\$ 21,341,519 00
To capital as profit .....	3,394,968 00
To land owners as royalty, 59 cents per ton or 25% ...	8,614,985 00
Total .....	<u>\$ 33,351,472 00</u>

The following table shows the total product of timber, coal and iron ore and royalties paid by the state of Michigan:

Timber product.....	\$ 74,050,773 00.....46%.....	\$ 34,063,356 00
Coal, profit.....	1,297 00.....25%.....	324 00
Iron ore product.....	15,800,521 00.....25%.....	3,950,130 00
Total royalties .....		<u>\$38,013,810 00</u>

If the above sum were covered into the state treasury of Michigan it would meet the expenses of the entire municipal, county and state governments and leave a handsome surplus for further uses. While Michigan is the largest single producer of lumber and iron ore in the United States, it will require no figures to demonstrate that in our state our royalties from our coal, iron ore, silver and gold mines and timber lands would defray the running expenses of our state and municipal governments to say the least, thus relieving our people from a large part of our assessments for taxes. For instance: The Rocky Mountain News, January 1, 1894, gives the following figures as to production for the year 1893:

Gold mines.....	\$ 8,295,031 00
Silver mines.....	19,484,667 00
Iron mines .....	2,970,889 00
Coal mines .....	6,694,283 00
Lead mines .....	4,987,332 00
Lumber.....	3,500,000 00
Total.....	<u>\$ 45,932,202 00</u>

Applying as far as possible the royalties of the preceeding tables we have—

Iron .....	\$ 2,970,889 00.....25%.....	\$ 742,722 00
Coal.....	6,694,283 00.....13%.....	870,257 00
Lumber .....	3,500,000 00.....46%.....	1,610,000 00
Gold and Silver .....	27,779,698 00.....10%.....	2,777,797 00
Total .....		<u>\$ 6,000,776 00</u>

As the total product of the iron is not the value of iron ore alone, but the manufactured product, the royalty figured is far too high, but as we have no estimate of the value of the products of the quarries, oil wells and so forth, we can safely permit the estimate to stand. The estimate on lumber royalties are also too high for this state, but on the other hand, the royalty estimated on gold and silver properties ranges at from 10 per cent. to 80 per cent. of the product, and as I have estimated the royalty at only 10 per cent. of the product, I believe the aggregate estimate to be much under, rather than over, the actual figures.

The Colorado Bureau of Labor Statistics was established at the instigation and upon the urgent appeal of organized labor to the legislature, because they had been studying economic questions and had come to the conclusion that there was no other source than labor from which, by our system of taxation, the wealth was obtained to meet governmental expenses. As Mr. Robinson, of the Michigan Labor Bureau so admirably states it in his report: "It seemed the less the fortunate possessor of wealth did, the more his fortune grew, while his plodding brother with scantily filled dinner-pail, knew he had labored incessantly and yet had never experienced the luxury of a six months' voluntary rest free from want."

To search out the cause or causes—if there should be more than one—for such a social paradox the bureau was created and was not restricted by law from following any line of investigation that would lead to the discovery of the remedy. Your commissioner believes that the foregoing tables clearly demonstrate that the owners of the special privileges granted them by law are enabled, through such ownership, to appropriate an unearned incre-

ment that is startling in its enormous aggregate, and is a partial answer to the question of How do great social inequalities come to exist?



# PART III.

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## *MISCELLANEOUS MATTER.*

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RENT AND WAGES.

COMPARISON OF RECENT CENSUSES.

THE CHECK TO POLITICAL CORRUPTION IN ENGLAND.

DEATHS FROM DRINK.

AGE RATIO PER 1000 INHABITANTS FOR VARIOUS COUNTRIES.

ESTIMATE OF UNEMPLOYED PERSONS IN THE UNITED STATES.

THE WIFE'S CONTRIBUTION TO FAMILY INCOME.

COLONIZATION AS A REMEDY FOR CITY POVERTY.

THE COMBINATION OF CAPITAL.

A YEAR'S TRIAL OF THE EIGHT-HOUR DAY IN ENGLAND.

BARON HIRSCH'S COLONIZATION SCHEME.

STATE FARMS IN NEW ZEALAND.

ENGLAND'S LABOR COMMISSION.

THE PHILOSOPHY OF MUTUALISM.

LAUNDRIES IN GREAT BRITAIN.

ADDRESSES TO THE WORLD'S LABOR CONGRESS AT CHICAGO,  
AUGUST, 1893.





## Rent and Wages.—An Object Lesson.

The following diagram is taken from the almanac of the English Financial Reform Association for 1892. It is published as an object lesson in the "Labor Problem." It has the merit of a clear and succinct presentation of Ricardo's theory of rent as popularly expounded by Mr. George:

RENT.	f.....	5	4	3	2	1	0
	e.....	4	3	2	1	0	*
	d.....	3	2	1	0	*	*
	c.....	2	1	0	*	*	*
	b.....	1	0	*	*	*	*
	a.....	0	*	*	*	*	*
		A 6	B 5	C 4	D 3	E 2	F 1
WAGES.	a.....	6	*	*	*	*	*
	b.....	5	5	*	*	*	*
	c.....	4	4	4	*	*	*
	d.....	3	3	3	3	*	*
	e.....	2	2	2	2	2	*
	f.....	1	1	1	1	1	1

The diagram represents land of varying desirableness; the best lot A, yields a return of 6 to a given quantity of labor; the next best 5, next 4, the next 3, the next 2 and the poorest 1 or a bare living. The first comers appropriate the best lot, and the return for their labor—that is, their wages—is 6. Since all are working on land of equal quality, there is no rent. So on lines a we put 6 to wages and 0 to rent in A section. But others come and there are now enough people to cultivate both A and B. It is evident that it will be just the same to the newcomers to work B and get a return of 5, or work A and get a return of 6, one of which they pay to the first comers as rent for the privilege of using their land; for in both cases the ultimate return is 5. On the best lot, A, the return is now 5 to wages and 1 to rent; on B, 5 to wages and 0 to rent. Still more come and A, B and C can all be cultivated. The return to labor is now 4, and the line c is—A, wages 4, rent 2; B, wages 4, rent 1; C, wages 4, rent 0.

Population increases further, and now A, B, C and D are in use, and the return for labor is now 3, and the line d is consequently—A, wages 3, rent 3; B, wages 3, rent 2; C, wages 3, rent 1; D, wages 3, rent 0. As population still increases, A, B, C, D and E are required. The return to labor is 2, and the line e becomes—A, wages 2, rent 4; B, wages 2, rent 3; C, wages 2, rent 2; D, wages 2, rent 1; and E, wages 2, rent 0. Ultimately the whole land is required. The standard of return to labor is now 1, i. e., a bare living, and the line f is—A, wages 1, rent 5; B, wages 1, rent 4; C, wages 1, rent 3; D, wages 1, rent 2; E, wages 1, rent 1; and F, wages 1, and rent 0. As population increases and land becomes occupied, the return to wages tends to decrease, until a mere subsistence wage is yielded, while rent constantly increases. By the taxation of land values this “unearned increment” would be taken for the benefit of the whole community.

## COMPARISON OF RECENT CENSUSES.

COUNTRIES	POPULA'N IN MILLIONS			INCREASE, 1871-1881		INCREASE, 1881-1891	
	1871	1881	1891	Absolute	%	Absolute	%
United Kingdom...	31.48	34.88	37.74	3,400,187	10.8	2,855,435	8.2
Canada.....	3.58	4.32	4.82	742,028	20.7	498,534	11.5
Australia.....	1.66	2.25	3.19	587,155	35.3	937,661	41.7
New Zealand.....	.26	.49	.62	233,600	91.1	128,695	26.3
United States.....	38.91	50.16	62.62	11,247,783	28.9	12,466,467	24.9
France.....	35.62	37.32	38.10	1,702,186	4.8	773,964	2.1
Germany.....	40.60	45.23	49.42	4,639,051	11.4	4,188,877	9.3
Austria.....	20.42	22.14	23.84	1,722,507	8.4	1,691,017	7.6
Hungary.....	15.42	15.74	17.34	322,259	2.1	1,596,670	10.2
TOTAL.....	187.95	212.53	237.69	24,596,756	13.1	25,137,320	11.8

## The Check to Political Corruption in England.

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The English political conscience is now extremely sensitive to bribery in elections or even the appearance of corruption. Severe sentences upon agents and political disfranchisement of whole constituencies, have brought the English electorate very near to perfection. Mr. Joseph Chamberlain, on his recent visit to America, said that corruption and bribery were at present almost unknown in England. This has been brought about mainly by the corrupt practice act of 1883, by which the expenditure of the candidate and his agents is limited to a certain sum, which is calculated upon the number of voters in the district. A promise to give refreshment, to pay traveling expenses, or to procure an office, or to give money for any of these purposes, or to give or offer anything possessing value and likely to influence a voter, is deemed a bribery. A loan, a charitable bequest, or even the giving of a holiday to an employe without deduction from his wages, may amount to corruption. The candidate is also responsible for the conduct of his agents, and an offense on their part, even if unknown to the candidate, will exclude him from that constituency for seven years. If bribery on a large scale, though not traced and fastened on anyone, has taken place, the election is void. If the candidate by any act of his

own or by any act of his agents, is convicted of bribery, he may be declared incapable of ever again representing that constituency. He may be fined £200 and imprisoned one year; and lie under a civil incapacity for seven years.

We present a table showing the legalized expenditures for borough and county members of parliament:

NO. OF ELECTORS  NOT EXCEEDING	BOROUGHS		COUNTIES	
	For One Candidate	For Two Joint Candidates	England and Scotland For One Candidate	Ireland. For One Candidate
2,000	£ 350	£ 523	£ 650	£ 500
3,000	380	570	710	540
4,000	410	615	770	580
5,000	440	660	830	620
6,000	470	705	890	660
7,000	500	750	950	700
8,000	530	795	1,010	740
9,000	560	840	1,070	780
10,000	590	885	1,130	820
11,000	620	930	1,190	860
12,000	650	975	1,250	900
13,000	680	1,020	1,310	940
14,000	710	1,065	1,370	980
15,000	740	1,110	1,430	1,020
16,000	770	1,155	1,480	-----

In the boroughs the maximum amount allowed for election expenses for any number not exceeding 2,000 voters is, for one candidate, £350—\$1,700, with an additional £30—\$146, for every increase of 1,000 votes. In the counties the maximum is £650—\$3,165, up to 2,000 electors, with an additional £60—\$292 for every 1,000 of increase.

## Deaths from Drink.

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According to Lombard, the ratios of deaths from drink for every 10,000 deaths in the following countries, were as follows:

Italy.....	1	Breslau .....	20
Genoa .....	5	Vienna .....	20
Turin .....	5	England .....	21
Amsterdam .....	5	Berne .....	35
Munich .....	6	Brussels .....	40
Dublin .....	10	Copenhagen .....	70
Edinburgh .....	10	New York .....	75
London .....	12	Oldenburg .....	87
Berlin .....	13	Kiel .....	90
Bale .....	20	Stockholm .....	90

An approximate estimate of the annual expenditure on alcoholic liquors in the United States is:

Wine .....	\$ 15,000,000
Beer .....	210,000,000
Cider .....	5,000,000
Spirits .....	95,000,000
<b>Total .....</b>	<b>\$325,000,000</b>

Five dollars and sixteen cents per inhabitant.

According to the internal revenue reports for 1889, the consumption of spirits was:

Spirits.....	81,000,000 gallons
Beer.....	780,000,000 "
Wine.....	34,000,000 "
Cider (probable).....	20,000,000 "
Total.....	<u>915,000,000 gallons</u>

Alcoholic equivalent per inhabitant, 1.34 gallons.





## Estimate of Unemployed Persons in the United States.

JANUARY 1, 1894.

In making the following list we have used the actual figures as given through state agents where obtainable. In estimating, we have used the published statistics of unemployed in various cities as a basis. Taking the proportion the unemployed in the towns reported in a given state bears to the total population of said towns, I have applied that per centage to all the towns of over 8,000 inhabitants in the state. I am satisfied that the result obtained is an under estimate. The figures obtained in this and other states, warrants this conclusion.

STATES	Population in towns of over 8,000	Basis %	Number out of employ- ment	Number dependent	Basis
Maine.....	120,346	9.5	11,433	549 6-0	2.4 to 1
New Hampshire.....	103,000	9.5	9,785		
Vermont.....	26,000	9.5	2,470		
Massachusetts.....	1,565,000	9.34	146,110		
Rhode Island.....	272,800	9	24,552		
Connecticut.....	385,000	9	34,650	1,383 036	2.4 to 1
New York.....	3,595,000	8.7	312,765		
New Jersey.....	783,000	Report	70,000		
Pennsylvania.....	2,150,000	9	193,500		
<b>TOTAL.....</b>	<b>9,000,146</b>	<b>8.95</b>	<b>805,265</b>	<b>1,932,636</b>	<b>2.4 to 1</b>

## UNEMPLOYED PERSONS—Continued.

STATES	Population in towns of over 8,000	Basis %	Number out of employ- ment.	Number dependent	Basis
Ohio.....	1,158,000	Report	225,000		
Indiana.....	398,000	Report	98,348		
Illinois.....	1,483,000	Report & Est.	153,470		
Iowa.....	268,000	9	24,120		
Missouri.....	702,000	9	63,180		
Nebraska.....	259,000	9	23,310		
Kansas.....	166,000	Report	75,000		
TOTAL.....	4,434,000	14.9	662,428	1,324,856	2 to 1
North Dakota total.....	179,330	2½	4,034		
South Dakota total.....	101,250	2½	2,277		
Michigan.....	271,000	Report & Est.	60,000		
Wisconsin.....	212,000	9	19,180		
Minnesota.....	195,000	Report	42,527		
TOTAL.....	958,580	13.4	128,018	256,036	2 to 1
Montana.....	24,500	25	6,125		
Wyoming.....	11,000	10	1,100		
Colorado.....	152,000	Report	38,000		
New Mexico total.....	76,920	5	3,846		
Arizona total.....	33,405	5	1,670		
Utah.....	56,000	25	14,000		
Nevada.....	8,500	25	2,125		
Idaho total.....	49,162	10	4,916		
Washington.....	99,000	5	4,950		
Oregon.....	51,000	5	2,550		
California.....	495,000	10	49,500		
TOTAL.....	1,056,487	12.2	128,782	128,782	1 to 1

## UNEMPLOYED PERSONS—Concluded.

STATES	Population in towns of over 8,000	Basis %	Number out of employ- ment	Number dependent	Basis
Delaware.....	61,000	9	5,490		
Maryland .....	465,000	Report	42,000		
District of Columbia....	231,000	2	4,620		
Virginia.....	222,000	5	11,100		
West Virginia.....	53,000	Report	4,000		
North Carolina .....	62,000	2	1,240		
South Carolina.....	79,000	2	1,580		
Georgia .....	199,000	2	3,980		
Florida.....	47,000	2	940		
Kentucky .....	276,000	5	13,800		
Tennessee.....	202,000	5	10,100		
Oklahoma, total .....	33,000	2	660		
Arkansas .....	55,000	2	1,100		
Alabama .....	89,000	5	4,450		
Mississippi.....	34,000	2	680		
Louisiana .....	264,000	5	13,200		
Texas .....	225,000	5	11,250		
Total .....	2,597,000		130,190	260,380	2 to 1
Out of employment.....				1,854,683	
Grand total .....	18,046,213	10.27	1,854,683	3,902,690	2.1 to 1
Total unemployed and dependent.....				5,757,373	

If the above estimate be approximately correct, then, with a population as given by the last census of 18,000,000, living in towns of over 8,000 inhabitants, we have in such towns about 1,854,000 unemployed persons and about 3,902,690 persons depending upon them for support. But this is not all the story. We have a total population of, say 68,000,000, deducting therefrom the above 18,000,000 and 15,000,000 farming population we have remaining 35,000,000 living in towns of 8,000 or less inhabitants. Would it not be a low estimate to say that in such villages two persons in every hundred are living in enforced idleness? If so, then we have 700,000 unemployed with 1,400,000 dependants to add to the foregoing estimate, making a total of 2,554,000 unemployed and 5,302,690 dependants; or a grand total of 7,856,690 persons which is over 11.12 per cent. of the total population. Who can have an intelligent comprehension of the magnitude of this vast concourse of people. Old soldiers who have seen 250,000 men on the field, and but few have been so situated as to have done so, may, by imagining an army 31 times as large form some idea of this multitude. We are considering a population more than equalling two cities like London, three like New York and Brooklyn, five like Philadelphia, sixteen like Boston and fifty-six like Denver.

Imagine, if you can, the accumulated wealth that is being consumed by these people. If employed, they would be paid for their labor and easily consume \$4,000,000 worth of products per diem—\$120,000,000 per month. How long can the country stand this drain upon the resources of those who are yet permitted to labor, and what has the future in store for us if something is not done to relieve this strain upon our institutions, are questions demanding our most serious attention and most earnest efforts.

## The Wife's Contribution to Family Income.

Read before Section F of the British Association, September 18, 1893.

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It is a matter of common knowledge that there are large numbers of women who work under terrible conditions, toiling long hours for starvation pay in the midst of filthy and unhealthy surroundings. A little time ago it was the fashion to ascribe this appalling state of affairs to the sweating system, and to define sweating as a method of employment involving sub-contract.

The painstaking inquiries of Mr. Charles Booth, Mr. David Schloss and Mrs. Sidney Webb soon proved that the evils in question were constantly present in cases where there was no system of sub-contract, and were likewise absent in numberless cases where the method of employment was that of sub-contract. Sub-contract having thus been shown not to be at fault, the next cry raised was that home-work was to be held responsible, and particularly the home-work of women.

The outcry against sub-contract had been swelled by the antagonism of labor to capital—the dislike felt by the man who works for wages to the man who works for profit. The outcry against home-work is swelled by the hostility of the workingman to the woman wage-earner. This feeling of resentment at women's presence in the wage market is based upon fundamental ignorance of social and in-

dustrial history. The popular impression seems to be that women to-day are taking a larger share of the world's work than they have ever done before—that this is a new departure, the outcome of the factory system.

As a matter of fact, the share taken by women in the work of the world has not altered in amount, nor even in intensity—only in character. Even in character it has not changed as much as the workingman imagines.

Leroy Beaulieu has good grounds for hazarding his assertion that, if only our classical education had familiarized us with something more than mere details of the camp and the forum, we should see that the organization of labor amongst the ancients differed far less from our own before the introduction of machinery than is generally supposed, and that women took a vastly larger and less sedentary part in productive industry than our prejudices will allow us to admit.

Confining our attention to later times, however, and dealing with the more precise data to which we here have access, we find that it was in France that woman's industrial position was first secured. Under the feudal system the serfs in that country had not only to yield to their lords part of the produce of the land, but to render to them linen yarn, pieces of stuff, tunics and other garments, the work of their female belongings.

"Long before the tenth century the old seigniorial manor included besides farms and fields, work-rooms of men and women."\* Light work such as spinning, weaving, bleaching, dyeing and the making of clothing fell to the women, most of whom worked in their own homes, but many of them in the gynecaeum. Sometimes the gynecaeum was under the direction of the wife of the feudal lord,

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\*"Le Travail des Femmes au XIX. Siècle:" Leroy Beaulieu.

who allotted the tasks and herself shared in them; sometimes, as in the case of the monastic manor, it was controlled by the abbey intendant, who supplied all the material and saw that no time was wasted.

As early as the ninth century, too, associated work entered upon a new phase through the introduction of industries into monasteries and convents. The spinning and dyeing of wool engrossed a considerable portion of the nun's existence. Not only in many cases did they make everything needful for their maintenance, from bread down to shoes, but they worked for the outside market as well.\* This, as every one knows, they have still gone on doing all through the centuries. Not the least interesting detail in the life of the great Galileo—contained in an incidental mention in his correspondence with his daughter, Sister Celeste—shows that he had all his needlework and washing done at the convent of St. Matthew, in Florence, and was a good customer to it for candied fruit and citron. Convents, indeed, were active centers of industrial life, and in their efforts to supplement their revenues, competed largely with outside labor and promoted improvements. Thus, the Flemish nuns, in their convents near Ghent, brought out that point lace which was so largely produced during the fourteenth and fifteenth centuries.

When we come to the latter half of the middle ages we get a still better notion of the extent and nature of the industries engaged in by women. In the production of luxuries for the nobles, in countries where the industrial arts had made any progress at all, women early bore their share, and that this share was no inconsiderable one is apparent to any one investigating the history of ecclesiastical embroidery, white embroidery, the manufacture of such light fabrics as battiste, muslin, silk textiles and, above all, of lace.

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\*Levasseur: "Histoire des Classes ouvrières," II., ch. iv., p. 139.

The even larger share borne by women in that productive industry which supplied coarse food and clothing of themselves and their families, is less patent, because industry of this kind was domestic in a double sense—being carried on by the family for the family—each family supplying its own wants first and then disposing of the residue. Obviously, where all the members of the family work together, it is difficult to estimate precisely the monetary value of the individual contribution to the total labor required.

The difficulty exists even when the work is being done for outside custom as is very well illustrated in the present day by the East End tailoring trade. A daughter, receiving subsistence and a certain amount of pocket money, "helps" her father; a wife, receiving subsistence and no pocket money, "helps" her husband. It is not till the wife as a widow and the daughter as an orphan, do precisely similar work at fixed rates for a tailor not related to them, that the world realizes that what is called "helping" father or husband is really "maintaining herself."

In primitive industries the male head of the family disposes of the finished product, sweeps in the earnings and distributes them as his caprice or interest determines. What was the rule in pre-machinery days is even now the rule in some of the surviving domestic industries of England—for instance, in the wrought-nail trade of South Staffordshire, where the man's "stint" of nails constantly embodies the labor of wife and daughter, though his name alone appears on the master's books. Something analogous to this is described by Mr. Scott in his interesting account of the Co-operative Society of Basket Makers at Villaines (*Economic Journal*, September, 1893). "The baskets," he says, "are entered in the workman's name by the secretary, whether he or his family have actually made them, and he is credited with the amount."



Where the financial arrangements are of this nature, there is obviously no talk of women's work—the husband is the nominal worker. And I venture to think that a great deal of woman's work in the past has escaped the notice of economic inquirers through this practice of throwing in her work with her husband's.\*

In sparsely-settled districts and in industrially backward countries, such as England was before the fifteenth century, women are not idle, but are constantly associated with men in agricultural labor. In the "Crede of Piers Plowman" there is a graphic description of the peasant's wife leading the oxen while her husband guides the plow. "Before the plague," says Thorold Rogers, "women were employed in harvest work, in reaping the stubble after the corn was cut (for the thresher or for litter), in hoeing, in planting beans, in washing and shearing sheep and sometimes in waiting on the thresher or tiler."

In face of all this evidence of women's activity in the past, it is simply absurd to denounce their alleged increased employment in the present, or to seek to saddle nineteenth century civilization with the onus of having evolved the working-woman and set up competition between the sexes.

This competition is no new thing. As early as the reign of Edward III., women's need to earn a

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\*Cf. "A history of Agricultural Prices in England," by Thorold Rogers, p. 75. The Manor of Thorncroft—that is, Leatherhead in Surrey—contained one tenant in villenage. From him numerous labor rents were exacted, amongst others, "To find one woman to wash and shear sheep and lambs, and to do this for nothing." This woman would naturally have been either his wife or his daughter. Cf. also Craigie's "Size and Distribution of Agricultural Holdings in England and Abroad," Journal of Statistical Society, vol. I. "A special form of petite culture prevails in Sweden, whereby small plots called 'torps'—about 180,000 in all—are let to laborers who pay rent, not in produce or money, but in labor—one to three working days a week, and certain extra work by women at harvest, being the usual terms."

living was recognized by a law prohibiting men from the use of the distaff and spindle, while in 1789, just before the Revolution burst upon Europe, a petition of the women of the Third Estate to the king, set forth that every occupation which involved spinning, knitting or sewing should be reserved exclusively for women.

Facts of this sort make the more cautious and thoughtful among the opponents of female labor content themselves with attacking, not so much women's wage-earning altogether, as the practice of continuing wage-earning after marriage. This, at least, they declare is an innovation, and one which heralds the destruction of the home.

So obvious are the evils consequent upon the withdrawal of the wife and mother from the domestic hearth, that it would be impossible not to sympathize with the men's point of view, did they confine their opposition to the employment of married women in workshops and factories. But, seeing that they oppose quite as actively, work done for wages by married women in their own homes, it is clear that something else moves them than mere dread that maternal and household duties may be neglected.

Analyzing carefully, we find that what they object to is the wage-earning, not the work, of wives. Home-work enables a married woman to become joint earner with her husband; and they profess to fear that facilities in this direction may lead to the gradual substitution of the wife for the husband as bread-winner. Such a fear is the veriest scooped-out, sheet-draped turnip that ever made a village dolt take to his heels and run. If being joint earners with their husbands could have led to the substitution of the wife for the husband as bread-winner, then this substitution would long since have been effected.

For it is indisputable that women of the working classes always have been joint earners with

their husbands. At no time in the world's history has the man's labor alone sufficed for the maintenance of his wife and children.

So far from keeping his wife, the true account of the matter is that he and she have together kept themselves and the younger children, and this they continue doing to the present day.

It is not by economists that this truth has been overlooked. "In order to bring up a family," says Adam Smith, "the labor of the husband and wife together must, even in the lowest species of common labor, be able to earn something more than is precisely necessary for their own maintenance."

Nassau Senior is equally explicit: "We include as part of the wages of the married laborer, those of his wife and unemancipated children. \* \* \* The earnings of the wife and children of many a Manchester weaver or spinner exceed or equal those of himself."

Again, Thorold Rogers states that in England, before the plague, the total earnings and perquisites of an agricultural laborer were £1 15s. 4d. a year, and that, assuming that the wife worked only one hundred days in the year, 8s. 4d., or a little less than one-fifth of the whole, was her contribution to the family resources.

According to Roscher, in France in 1832, a man working in the field earned on an average 11-4 francs a day, the wife 3-4 of a franc (200 days to the year), and three children, 38 centimes (250 days in the year), an aggregate of 650 francs per annum. The wife's contribution thus amounted to twenty-three per cent., or a little less than one-fourth of the whole.\*

While economists have freely conceded that the wife's share in family maintenance, whether her

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\*Monsieur Baudrillart states that at the present day in the Arles district, the annual income of a family of petty peasant proprietors and petty wage-earners is about 850 francs, of which the wife contributes 150.

labor be confined to her home or no, is an appreciable one; responsible statesmen have on occasions made and acted upon the same admission.

Thus, in France, when a scheme of working class pensions was under consideration some fifty years ago, the then minister of Finance refused to entertain the project, on the ground that it did not sufficiently recognize the claims of wives. It was out of the question, he said, that one alone of a married couple should reap the benefit of an annuity, the payments for which were made possible by the joint labors of both.

Amongst English statesmen, Lord Brougham also seems certainly to have been alive to the large share taken by the wife in productive industry. Speaking at a meeting of the Society for the Encouragement of the Social Sciences, in 1862, he stated that one-seventh of the married women of England were engaged in independent and isolated labor, while in addition there were large numbers of wives, daughters and sisters who shared in the labors of their male relatives on farms, at the desk, behind the counter and in domestic workshops.

Miss Edith Simcox, then, was within rather than beyond the truth, when she affirmed before the Industrial Remuneration Conference that in England "not more than half the whole number of working class families are maintained by the labor of the father assisted only by the elder children."

Even in America, where one would suppose men's wages would be on a sufficiently liberal scale to enable them, unassisted, to provide for wife and children, the wife's labor is an important and necessary factor in family maintenance. The United States Department of Labor recently conducted an inquiry into the industrial conditions of Europe and America, subjecting the industries of coal, iron, steel and glass, and cotton, woollen, silk and linen textiles, to complete investigation, and collecting budgets of cost of living from 770 workmen em-

ployed in Europe and 2,490 employed in America. As a result of these investigations, it was ascertained that not only are the total earnings of the family, highest in America, but the contribution of the husband thereto is both relatively and absolutely higher than elsewhere. Yet even here "only in two cases—namely, the bar-iron and steel manufacture—was it possible for the husband, unaided, to support his family." In Belgium, where the return to labor is generally small, it is calculated that only three-fifths of the family income comes from the husband's wages.

But it may be urged, grant that wives have at all times earned their bread, is it not perfectly possible that they are beginning in these modern days to do more than earn their bread? Are we not witnessing a real displacement of male labor? To this the answer is a decided negative. There may be a change in the distribution of male labor, but that is quite another matter from its displacement. The woman's share in household maintenance is no more than it ever was. The facts have not altered, but the conditions of modern industry enable us to see what the facts are. In short, we are witnessing not a process of substitution but of revelation.

People who assert glibly that wives in the past had enough to do looking after their homes, seldom realize what looking after the home meant a hundred and fifty years ago. It meant chopping wood, fetching water, baking bread, spinning flax, weaving, knitting, pickling, curing, churning, preserving, washing.\* But now water is laid on into the

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\*An incident in the life of a notable American woman, detailed by Helen Campbell in an article on "Women Wage-Earners," in the *Arena*, shows what looking after the home has sometimes meant. "In mid-winter, with neither money nor wool in the house, one of the boys required a new suit. The mother sheared a half-grown fleece from a sheep, and in a week had spun, wove and made it into clothing, the sheep being protected from cold by a wrappage made of braided straw."

houses; bread is bought at the baker's; it is cheaper to buy garments than to make them; wood and coal are brought round to the door in carts, and jam and pickles, butter and bacon are all to be had from the general shop. So that now—for dwellers in big cities, at any rate—"looking after the home" means only cleaning, cooking, washing, mending, care of children being the same in both cases. Even washing is ceasing to be the essentially domestic occupation it used to be, many women finding it more profitable to work at some trade in their homes, and to give their washing out to a poorer neighbor to be done in the municipal wash-houses, or in the places set apart for washing in model buildings.\*

Though women did not earn wages for all the multifarious occupations which "looking after the home" formerly involved, it is clear they did as much of the necessary work of the world as they do now. If, then, the fallacy that there is a limited amount of work to be obtained, and that the more the women take, the less the men get, be supposed true, it is certain that female labor competed as much with male labor heretofore as now. The only difference was that each woman took an infinitesimal share of a great many kinds of work, whereas now she takes, as a tailoress, clerk, jam factory girl or what not, an appreciable share of one particular kind of work.

Without drawing subtle distinctions, however, I may conclude by saying what I think few will dispute. So long as the wife must contribute her quota to family maintenance it is distinctly advisable that she should be allowed to do this in the way she her-

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\*Le Play, with whose works Mr. Henry Higgs has done so much to familiarize English readers, predicted long ago that amongst Western nations, washing would ultimately cease to be carried on as a domestic industry. Now that steam laundries are springing up on all sides, and vast amounts of linen are washed by men and machinery, this prediction seems in a fair way of being realized.

self finds least irksome. The ideal to be aimed at I submit, is not that the man should be the sole bread-winner, but that bread-winning should go on under circumstances which secure the most comfortable life for the men, women, and children composing the family, which permit the fullest development of all powers, and which openly substitute economic co-operation on the part of the wife for economic dependence. Tested by reference to this ideal, home-work will always, in the very teeth of admitted drawbacks, find itself justified, for it indisputably allows the married woman to contribute her share to family maintenance in a way congenial to herself, and on lines which are constant with the beauty and stability of family life.—Ada Heather-Bigg, in the *Economic Journal*.

## Colonization as a Remedy for City Poverty.

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In 1790 but 3 per cent. of the population of this country lived in towns of more than 5,000 inhabitants, and as late as 1840 only 8 per cent. so lived. Then began the modern drift of population to the cities; until, in 1880, 22 per cent., and in 1890 more than a quarter of our population, were city residents. It is this ceaseless pull of the city on the population which most perplexes charity. If, even in so monstrous and unnatural an aggregation of humanity as the city of New York, charity could deal for a while with a fixed quantity, the problem of relief would seem almost simple; but the complicating and, sometimes, the heartbreaking aspect of city charity is the constant inrush of immigration, foreign and native, as though a city were a whirlpool which drew into itself all the floating fragments of unattached humanity.

What, then, are the nature and effect of this influx to the cities; and what does it indicate as to methods of relief? As to the first of these questions—the character of the influx—we are in a position to make at least a partial answer, for the influx to city life has been lately analyzed with scrupulous care in the case of its greatest dimensions and complexity. One of the most remarkable researches in Mr. Charles Booth's remarkable book is the study of this influx to London. It is made by



a most competent young student, Mr. Llewellyn Smith, and his conclusions, though they may be subject to change in detail to meet other conditions, are of the most fundamental importance. Mr. Smith first eliminates from his inquiry the foreign-born residents of London, and then considers the proportion of London residents born in other parts of England. His result is twofold:

First, he observes that an extraordinary proportion of city-dwellers—not less than thirty-five per cent. for all London—are country-born; and, secondly, he adds the much more remarkable fact of a definite ratio between country birth and poverty. The proportion of country born is, he believes, in inverse ratio to the poverty of the district. Where the poverty is greatest in London, there the country-born are fewest; and where prosperity prevails, there the country born predominate. In Bethnal Green, the center of poverty, there are but 12.5 per cent of country-born, as compared with 35 per cent. in the whole metropolis, and in Whitechapel there are but 20 per cent.; but on the other hand, in Mayfair no less than 59 per cent. of the population were born in the country, and in Kensington and Belgravia, more than one-half. What does this mean as to the character of the migration? It reverses the common impression as to the nature of this drift. It is commonly supposed that the city draws to itself the worst elements of society—that the riff-raff of the country drifts to the city and constantly increases its debasing elements. But the fact seems to be—so far, at least, as London proves it.—that the city draws to itself the most competent. The most vigorous and venturesome of the country-born are tempted by the prizes of city life and its increase of the chances of success, and, coming to the city fresh and alert, the country-born capture the prizes, and the town resident goes to the wall in the competition. Thus there is in city life a con-

stant "indraft" and then a "downdraft." City work first invites, and then degrades. The country-born first invades and captures the city, and is then in turn himself taken captive by it, as by some monster which devours those who feed her. Thus the influx to the city is not primarily bad for the city. This accession of fresh workers is, indeed, what keeps the city work well done. The evil comes through the deteriorating effect on the migrant, and still more on his children. City work seems to be like the exhausting labor which goes on in the fire-room of some great steamship: it needs a constant accession of fresh hands.

Such is the solemn picture of this movement of life to the city—an indraft and then a downdraft; a picture which, if not so fearfully true elsewhere as in London, is yet not far from that which any charity worker in the heart of city life would have to paint. To what general principles of judicious charity does this statement of the influx point? Not, of course, to any single panacea which can remedy at once the deterioration of city life. A multitude of changes—corrective, educative and industrial—have their place in this remedial work. Yet the logical inference from this story of the influx is clear. If the influx to the city is thus a peril, the correction of it must finally come through the development of an efflux. If the social circulation thus flows into the city and then stagnates there, this circulation must be completed by an outflow to the depleted country. If there is this indraft and downdraft in city life, a counter-draft outward should be induced.

There are many ways in which this renewal of social circulation is proceeding among us by natural and often by unconscious methods. The vast development of surburban life is one of these distinct contributions to social health. Each of those modest cottage homes, which now in endless rows

border the outskirts of each great city, increases the chances of self-help and domestic integrity—the two qualities which stable civilization most demands. Each scheme of rapid transit encourages this ethical end. The signs of the times point, perhaps, to an era when a city shall be for the most part simply a vast warehouse and shopping place, into which a great tide of population will flow each morning, only to ebb again each night, so that, as in the case of that region of London specifically known as “the City,” the population of these trading places may tend to decline rather than to increase. This is one natural means of efflux provided for persons of moderate means. There is also some degree of natural efflux on the part of the very rich. This class of persons, so obviously less fortunate than the first, cannot, with complete self-respect, remove themselves altogether out of the city; for the city offers to them special resources of intimacy, of ostentation, of dissipation and of occupation of many otherwise meagre and empty lives. Yet more and more the city is perceived by the rich to be a deteriorating influence. They see this, first, in the case of their children, and especially of their boys, and deport them to the better environment of country boarding-schools. This increasing habit is the same in principle as the method long pursued by the New York Children’s Aid Society in the deportation of the children of the poor. It is a “placing out” system. The downdraft of city life is escaped by this colonizing of the children of the rich—a system which procures at least for them, the same advantage which has been for years enjoyed by the children of the very poor. Even the grown-up world which calls itself society, feels more and more the strain of continuous city life and its laborious and wearing demands; and as soon as these preposterous demands seem satisfied, the country claims the rich,

until now, for at least six months of the year, a street of the prosperous in our city might be mistaken for a street of tombs.

There remains, however, that vast class who have been drawn in by the draft of city life and then drawn down to the bottom. No natural relief comes to them. They have neither the means nor the intelligence to migrate with the efflux. The same instinct which drew them to the city holds them there. They are attracted by the chance of easy life, and this tends to make them unthrifty and casual workers, until at last they are the worn-out stokers of the great engine-room of city life. Here is the central problem of city charity. What is to be done with this submerged class, this social sediment which drops to the bottom and clogs the movement of the stream?

Once more we must answer that no single method can deal with this tragic problem. Indeed, we must add that no series of methods can deal with it very quickly. An evil of such dimensions and such unchecked growth calls, first of all, for patience; and the hardest trial of any one who gives his heart to the alleviation of such evils is the necessity laid upon him of slow and imperfect work. "The trouble is," said Theodore Parker, of the anti-slavery cause—and any charity worker must often repeat his words—"The trouble is that God is not in a hurry, and I am." The logical and natural method is the development of an efflux to relieve this congestion. If the social circulation will not complete itself by natural means, then it must be artificially stimulated, as by the colonization of the unfit. The colonizing—or rather, the domesticating—of children away from the downdraft of the city is the essence of child-saving charity, and it is best illustrated by the monumental work of the New York Children's Aid Society. Its 100,000 wards, scattered through all our states and territories,

justify the title given to this work by one of its most competent observers, as "the noblest work in the world."\* This is the method of anti-institutionalism, and this, I take it, is now the first principle of child saving. No form of charity is, on the whole, so extravagant for any city as the maintenance of great asylums, and no way of life is likely to be so pernicious to children as life in an institution. "The institution boy," says Mr. Riis, "makes the poorest kind of apprentice. He is only saved from being a tough by becoming an automaton." The first rule of wise municipal care of children is not only "out-of-door relief," but "out-of-town relief," and the farther out the better.

Such is the colony plan in its simplest form of application. For the indefinitely more difficult case of the colonizing with adults, we have to guide us two forms of experiments; that of Holland and that of Germany, of which last the colonizing plan attempted by the Salvation Army is a direct, though not a clearly acknowledged, imitation.

The Dutch plan reduces relief in the town to the smallest possible proportions.\*\* No great poor houses and few able-bodied paupers are there to be met. The policy is that of segregation. Its method is twofold. On the one hand is the voluntary colony, a tract of about 5,000 acres, divided into six large model farms, and 224 small holdings, receiving in all about 1,700 persons. This colony is directed by a voluntary society with state aid. A poor person making application to the society for relief may have the opportunity of removing to a model farm, and, having served his apprenticeship, may be transferred to a small holding and become a "free farmer." On the other hand is the forced labor colony. The legislation against mendicancy and vag-

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\*J. A. Riis in *The Forum*, January, 1894, vol. xvi., p. 624.

\*\*The Dutch labor colonies are described by H. V. Mills, "Poverty and the State," London, 1886; and in vol. iv. of the "London Charity Organization Review."

rancy is strict, and a person convicted of such offenses is sent, after a short term in jail, to the compulsory colony. It lies twelve miles from the railway and it has no visible barriers, though its occupants wear a uniform dress and are, in a way, guarded. Yet the occupant has no great inducement to run away. If he runs to the towns he is likely to be at once again arrested and returned again to the colony; and if he flees the country, and perhaps migrates to America, that is just what Holland would desire. Each laborer gets the necessities of life and a small weekly stipend, one-third of which he must reserve to his day of release. Neither colony is self-supporting, but it is at least several times less extravagant than the maintenance of the same number of persons by the state in city poor-houses and jails, but it at least removes the unfit from competitive life, and reduces the problem of the city.

The labor colonies of Germany have a different design. They intend to meet the need not so much of the submerged in the cities as of the tramp in the country. They are temporary refuges where a man who, through the tramp habit, has lost the power of continuous industry, may voluntarily betake himself and be made over into a steady workman. They are the scheme of a devoted and saintly pastor, and express at every point that Christian feeling and that friendly piety which in Germany has come to bear the name of this noble man, and to be known as "Bodelschwinghgeist."\* Nothing could be more ingenious than the way in which Von Bodelschwingh's first colony insured strenuous labor and avoided competition. Near his town of Bielefeld stretches away a great sterile tract of sand. Beneath the surface,

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\* The German labor colonies are described in *The Forum* for February, 1892, in which article further references are given; also in "A Colony of Mercy," London, 1893. They are severely criticized in the "Journal of Political Economy," of Chicago, for December, 1893.

however, at a depth of about three feet, is a stratum of bog-iron ore, a few inches thick, and hard as iron, which, when thrown up to the furnace and exposed to the air, becomes rich and natural manure. Thus, as has been said, a submerged humanity was set to work to reclaim a submerged soil; and this labor has transformed a little corner of that dreary region from a desert into a garden. This colony, which is one of twenty-two in various parts of Germany, is not self-supporting. Its expenses in 1889 were \$15,000, and its earnings about one-half of that sum, the deficit being made up by voluntary benevolence. But on the other hand, in the province of Westphalia, ten years ago, some 4,000 men were professional tramps, and their support, at 25 cents a day each, must have cost the community something like \$300,000 a year. The German labor colonies have been much criticized. It has been pointed out that they are more and more resorted to by discharged convicts. It is further shown that many of their occupants stay but a short term; that many are repeaters, or "colony-bummers," as they are called in Germany; and that but a small proportion of the colonists are restored to steady work. Yet, a refuge for the peculiarly friendless class of discharged prisoners is no small blessing; and a record which shows about 50 per cent. of these migratory patients as voluntarily remaining at the colony for more than two months, and 65 per cent. at the colony for the first time, and something like 20 per cent. returned to definite occupations, cannot be called hopelessly bad. The German system must be considered in relation to the specific problem with which it deals, the migratory habit of German labor; and it is so devotedly and religiously administered that no better results can be reasonably looked for in a voluntary system.

Comparing the German plan with the Dutch, we have the two possible kinds of colony. The German plan is one of Christian charity; the Dutch plan is one of state socialism; the German plan offers an oppor-

tunity; the Dutch plan enforces an obligation. The German plan is repeated in the form of the Salvation Army, with its now very dubious financial results; the Dutch plan realizes the proposal of Mr. Charles Booth, that the whole of his class of the "very poor" should be withdrawn from city competition and set to forced labor as at least partial contributors to society.

How far, then, is any such system applicable to the conditions of life in this country? What is the class of persons to be here dealt with? Have we in our cities a distinct and permanent class of the unemployed who are wanting work, but are forced to the wall in competition? If this is the case, then the voluntary principle should be accepted, and it would be enough, as in Germany, to offer an opportunity for self-redemption. Or is there in our cities in normal times no such distinct class, and is the submerged body of "out-of-works" really made up of the "don't-want-to-works," or, perhaps, of the "don't-know-how-to-works?" Then the offer of an opportunity would not be enough. They would not have the self-command to turn voluntarily from the beggary of the city to strenuous country labor; and the forced-labor principle of Holland, rather than the Christian charity of Germany, would have to be accepted. I do not doubt that there is some degree of opportunity in this country for both principles. It would be, at least, most interesting if some city-relief society or some individual should try the experiment of a voluntary colony. In the very noteworthy paper on this same subject presented by Mrs. Charles R. Lowell to the Chicago Charity Congress she describes one such undertaking—that of Mr. Joseph M. Drexel, maintained at Plainville, N. J., from 1874 to 1888. This farm is reported as costing \$979 a year for administration. It received from thirty to forty men each year; and in its last year—1888—of forty-four colonists, twenty-two, or just half, were transferred to permanent situations on farms, thus practically



relieving the city congestion. One returned to friends, sixteen to New York, and five remained on the colony farm. Here is no unprofitable showing; and in a critical emergency like the present one, voluntary migration from the crushing environments of city life to well-ordered farm industry might be at least for a time welcomed by many persons in whom the desire for self-help still exists. A plan like this would be, I suppose, the most irreproachable form in which an individual or a society could contribute to the relief of the present grave distress. And yet, when we consider, not the present emergency, but the condition of this country in ordinary times, I think we cannot expect great things of voluntary colonies. When industrial conditions are normal, it is probably not the case that willing and sober workers will have to wait long for occupation.

What makes these unfortunates go under in the strain of city life is, as a rule, their lack of persistence in will, or lack of soberness in habit. Either they do not know how to work, or they will not work continuously, or they have become incapable of hard work through physical or moral weakness. This, which would be, I suppose, the general impression of most charity experts, is greatly fortified by Mrs. Lowell's special investigation. She reports a series of inquiries made of the chief administrators of charity in New York city as to the quality of applicants and the causes of their lack of employment, and in every case her returns point, first of all, to moral or physical incapacity, such as could not or would not profit by a voluntary system; and she forcibly concludes that, if a colony is to demand of its occupants strenuous exertion and strict self-control, the great proportion of our unemployed would simply not go to it, or would at least soon run away.

We are directed, therefore, to what we may call the Dutch system—a method of state control, based on rigid legislation as to mendicancy and vagrancy, and deporting persons thus convicted for these slight

offences from the life which has degraded them to the restorative effect of well-organized farm labor. It is a substitute, that is to say, for much of our present system of jails and poorhouses, which, as Mrs. Lowell, with severity bred of her long experience, remarks, "seems to be carefully prepared to do as much harm as human ingenuity could devise to the unhappy beings who are condemned to enter them." I do not suggest an immediate overturning of our whole system of corrective institutions in favor of rural colonies. It is a method which could be developed with any degree of caution. A city might make the experiment at first on a very small scale, knowing that at any rate it would be economical, and could be hardly less educative than institutional life. Nor do I mean that the present crisis could be at once met by a direct enforcement of such a compulsory plan. Many persons, as I have already said, are now destitute who should not be treated as offenders, and many who need but very temporary and very special help. But, looking at the policy of city charity in the most general way, and considering how this fearful down-draft of the city is to be counteracted, one can hardly help imagining some ideal future, when a city shall, even for its own self-protection, redistribute its inefficient citizens in ways which shall at once save the city from the burden of their idleness, and save the citizens from their own ever increasing helplessness.

In that ideal time, what should a city say to such a submerged life? It should say, "First of all, you must go out of town. You are a dead weight here, sinking from bad to worse, and dragging other lives down with you. This is not a good place for you, and it is not good for the city that you should stay here. Two alternatives are before you. Either you must apply to be sent to our voluntary colony, where every opportunity of healthy life and vigorous labor will be offered you, and where you may hope to be restored to capacity for social service; or else, coming on the charity of the city as the receiver of help de-

rived from taxation, you will be sent, not to a jail or poorhouse, where your inclination to idleness will be encouraged, and you become more and more a burden, but to a colony of compulsory farm labor adapted to your capacity and need. One thing you cannot do; you cannot stay here and beg."

Thus the city would hold in one hand the assurance of substantial and healthful work, and with the other hand it would warn off the loafer. Idleness would not only be a thing to be pitied, it would be a thing forbidden. To those proposing to be its citizens the city would say, "If you come to the city, it must be as a contributor to the common good, and if you have not the capacity or inclination for this, you must either not come or soon go. This city is not a sink for idlers; it is a well-conducted business establishment. No worn-out employe shall be discarded or abused. He shall be mercifully cared for in our convalescent colony, and given work not beyond his capacity and strength; but he shall not clog the stream of city life or hang there about the necks of the hard-working and self-respecting poor, who are just keeping their heads above water." For those who still have any capacity for restoration to social service, the vast development of city institutional life, with all its degrading results on its herded occupants, would be by degrees supplanted by colony life and country labor, and the unfit to compete would be at least segregated from competition, removed from many of their worst temptations, and not infrequently made over into useful, self-respecting lives.

I do not disguise from myself that this is radical doctrine. It is, of course, on any large scale a remote and visionary plan. It involves a wholesale change of opinion about city institutions and their work. It is based on the principle that idleness is not only a misfortune to be pitied, but is a social evil not to be endured. It is the principle that life in a social world means work, and that one of the first statements of history as to the law of God, "In the

sweat of thy brow shalt thou eat bread," remains still a divine command. The drift of life to the cities is largely made up of those who hope to escape this commandment. They want to live without work; and while many succeed, many sink, and, having begun with the lack of desire for work, end with the lack of power for work. The only final way to meet the drift to idleness is to enforce the gospel of work. The out-of-work should be set to work, not in the city, where the habit of work is hardest for him to form, but under the most recuperative and reformatory conditions to be devised. As Henry Fielding remarked, in one of the earliest studies of the causes of pauperism,\* "The great cure for idleness is labor."

Finally, it may be asked, "Is not this municipal socialism of an extreme type? Does it not accept the prevailing socialist doctrine of the right of every man to work?" I answer that it does; though it certainly does not teach the right to work wherever a man will or as little as he will, but dictates the conditions and prolongs the term of work. But the fact is that my doctrine goes far beyond the familiar talk of socialism, for it teaches not so much the right to work if one wants to, but the obligation to work whether one wants to or not. This is socialism; but it is socialism, so to speak, turned round. It is socialism with a side of it emphasized of which one hears little from the agitators. Much talk called socialistic is really only disguised individualism. It is really thinking of the individual only, and wondering what he can get out of the state or out of the prosperous. It talks of the right of every one to share in the spoils, and of the duty of the city to guarantee that share. But I am dealing with the aspect of socialism which thinks first of the common good; not primarily of my right of the spoils, but of my duty to the community; not of what I ought to get out of the state, but what the state ought to get out of me; not of what the state

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\* "An Inquiry into the Causes of the Late Increase of Robbers: 1751."

can do for me, but of what I can do for it. Mr. Lowell has said that democracy means, not "I'm as good as you are," but "You are as good as I am." So socialism means, not "I ought to have what society has," but "Society ought to have what I have."

To the many perils from which all cities even now guard themselves, and against which all legislation is socialistic—perils like the drink habit, the selling of dynamite, the evil of prostitution—we should add one more peril; that of idleness. Every member of a modern state ought to be, in some way and degree, by his mind or his hands, or both, a contributor to the great welfare. If that is socialism, let us make the most of it. It is also the hope of stable civilization and the secret of judicious charity.—Francis G. Peabody in The Forum.

## The Combination of Capital.

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It requires but little observation to assure one that the competitive system of industry is fast passing away. It is on every hand succumbing to trusts and other combinations for production and distribution. In agriculture, in some simple forms of manufacturing, and in retail trade, competition persists more or less perfectly, and bids fair to do so for a long time to come. But in almost every line of activity where combination is possible—and it is possible in nearly all—combination of some kind either already prevails or is in process of establishment.

Trade combinations are of various sorts. There are mere monopolies, where certain parties, few or numerous, sufficiently control the entire market to determine the prices at which wares are bought and sold. Then there are cases where different dealers, not closely bound together, have an understanding not to sell under such-and-such prices. Pools form a third variety of combination. Regular contracts to allow special rates in return for exclusive trade are a fourth. Corners, of the well-known sort, make a fifth. I mention as sixth a form of combination which is usually called a trust, but not very properly so. A small firm sells out to a larger one, receiving a lease in return, and perhaps also some stock. It then goes on in apparent independence, though really under the thumb of the purchasing party.

In the trust proper, or unincorporate trust, making a seventh class, several corporations place their

stock in the hands of certain trustees, who, issuing trust certificates in return for such stock, so that the profits of the consolidated concern may be properly passed around, yet themselves, owning, or at least holding, the stock, direct more or less completely all that each of the corporations does. This is the trust par excellence, made so familiar in the earlier history of the Standard Oil trust, the Cotton Oil trust, the Sugar trust, and the Whisky trust. The eighth and last kind of combination is the incorporated trust, an arrangement to which most, if not all, of the old unincorporated trusts have now been driven in order to avoid the attacks of the law. This change does not alter the form or the purpose of their activity in the slightest. It simply makes them legal.

Although these bandings together of capitalists are now usually protected by law, I call special attention to the fact that the system of combined business is not originally due to legislation, or to any extent kept up thereby. Combination has sprung from the very soul of our old laissez-faire competitive sort of industry. These monopolies daily arising to new power and numbers, are the logical and inevitable result of that industrial liberty which was formerly our boast. They are the products of economic and social forces, not of statutes.

At the beginning of this century competition was almost universally considered a sort of divinely-appointed instrumentality for the fixing of prices in a just manner. If, it was said, given dealers charge more than cost of production plus a living profit, others will undersell them; if less than this is the price, dealers will fail, competition become less severe, and prices recover the fair level.

Man at last saw, however, that competition did not always work in this benign way. If the operation specified was the normal effect in small and simple industries, quite a different result revealed itself in massive and complex production. In this the manufacturer first in the field might charge for his

products far above cost and reasonable profit, and long continue to do so, before capital, ever apt to be timid, would take the risk of competing. When, on the other hand, competition did begin, it was nearly certain to go too far, pushing prices as much below the normal figure as they previously were above, leading to crises and failures, with vast losses, to the immense net depletion of public wealth. From perception of this destructive agency attending competition arose, in the most natural way, the tendency of capitalists to try co-operation, and be rid of competition.

Acrimony of competition was not the only force which prompted business rivals to join hands. They were pushed to this also by the fall in prices fatally incident to the vicious monetary system from which the world has been suffering since 1873. While prices are going down all the time, men are loth to enter upon productive industry without some special guarantee of safety and profit, such as was not necessary in times of rising prices and industrial prosperity. This motive for combination to gain shelter from industrial heavy weather, like the mere wish to escape competition, takes effect in a perfectly natural and logical manner. The combine is thus the brother of the protective tariff, and not its child, as so many allege. Most trusts are little affected by tariffs, flourishing about equally whether customs duties are high or low. Some are entirely independent of tariff legislation. The Cotton Oil trust is so. Another set would be more or less interfered with by a reduction of the tariff. The starch trust is one of these. It was built upon the tariff, and would perish were this support withdrawn. The great Sugar trust has derived little aid from tariff acts, and would not be crushed by out-and-out free trade. At least two American firms of sugar-refiners are strong enough to defy all changes in sugar duties. Were these removed, they would at once combine with each other, and, if necessary, with foreign refiners.



The Standard Oil trust is not in any sense indebted to customs legislation. There is, to be sure, a duty on petroleum, but it as yet has no effect whatever. After a time it will come to mean something. Russian oil is now strongly competing with ours abroad. As this competition waxes severer and presses nearer home, our tariff on oil may certainly come in to help the Standard keep up its prices. If after that time arrives the tariff should be thrown off, the Standard would almost certainly ally itself with the Russian producers.

This, I conceive, is going to be the general course of mammoth industry as the world grows smaller. The governmental protection of industries by tariffs will more and more give way to self-protection on their part, through international combinations. The tariff question is ere long to be removed from politics by the irresistible force of events.

Lest some think me mistaken in supposing that competition is vanishing from the business world, I wish to make it clear that monopoly often exists where it does not appear. Not a few suppose that monopoly is impossible in an industry so long as any sort of competition exists there. If the competition is other than formal, this is, of course, true; but in a great number of businesses where what is called competition exists, the competition is not real, but simply formal. People affirm that the Standard Oil trust, for instance, cannot be in the enjoyment of a monopoly because there remain active refineries not leagued with it. The argument is thought to be reinforced by the observation that the number of outside concerns has increased, perhaps even doubled, since the trust went into effect. A moment's reflection will show the belief to be unwarranted. It is not necessary, in order that a great business may be a monopoly, or, what implies the same, keep a higher than competitive price upon its goods, that it should directly control the entire production. Immediate mastery of a decided majority

is practically the mastery of all, and insures to outside dealers as well as to the allies whatever advance of price is realized.

No one will question that the great French copper syndicate enormously elevated the price of copper above what competition would have made it; yet it purchased only about three-fifths of the world's entire product. This enabled it to dictate prices to consumers, and all the little producers not in the syndicate came in for a part of the advance. This syndicate, a combination of the very loosest order, lasted nearly eighteen months, and during its continuance imposed upon the commodity in all the markets of the world, a purely arbitrary price not far from 100 per cent. above what it would naturally have been.

Every trust or combine known has to encounter formal competition more or less severe. If the total absence of this is required to secure monopoly, there is not a monopoly on earth. The Cotton Oil syndicate, the Whisky union, the Steele Rail league and all the rest throughout the lengthy list are met by a certain species of opposition. They do not mind this, however, for the most of them are as sure of a monopoly with it as without.

Combination in industry is to be permanent. Many cling to the delusion that these mighty combinations of capital are to pass away and the old time competition to return. Bills have been brought before half the legislatures of the Union to compel free competition by making trade syndicates absolutely illegal. To my mind there is no question that such legislation will be vain. The age of competition, as we have known it, has gone for ever.\*

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\* On this, see the author's article, "Individualism as a Sociological Principle," *Yale Review*, May, 1893. Other thoughts to be touched upon are more fully treated in "The Economic law of Monopoly," *Journal of Social Science* for 1889, and in "Trusts according to Official Investigations," *Quarterly Journal of Economics*, January, 1899.

Recall it? As well try to waken the dead. In simple industries, whose capital is small and little specialized, competition has worked well, and will continue. The weakest party drops from the strife to-day, to-morrow the next weakest, and so on. But each loss is slight. The unfortunate employer lets himself for wages, and his stock passes to creditors. In such business, competition is the best practical way to insure a healthy life. Not so when the contestants are industrial Titans, each with a plant worth its millions, much of it so specialized that to relinquish business is to sink it utterly. In such cases, which more and more each year represent the world's industry, competition cannot end with a little friction. It grinds, and, in time, kills. The great mill, placed at a disadvantage by position, by some tariff act, or perhaps by railway discrimination, is yet forbidden to shut down. That were to lose all. Better keep running and lose less than all. The least penny over fixed charges and running expenses is better than nothing. Down at least to that dead-line the strife is certain to go on, the stockholders impoverishing themselves that their mill may compete. At last a bankrupt sale ensues, machinery going for junk, the building left to collapse from decay. The victors survive but, of course, poorer because of the war. Here, too, competition has proved a regulator—as Caesar kept the peace in Gaul.

Men have learned of a much milder and more successful regulator—combination. Instead of keeping up that mortal conflict, they unite, pool their interests, make common cause against others trying to enter the field, parcel out the production in as fair a way as possible, and fix buying and selling prices, so that all alike may realize gains. No part of the casualty involved in this process is of a temporary nature. The history of the Standard and Cotton Oil trusts makes it certain, it seems to me,

that a combination of this sort, involving an absolute monopoly, which no power on earth can overthrow, may, with proper skill and capital, be set up in almost any substantive industry.

One of the causes mentioned which brought about the military organization of capital—I mean the long-continued fall in general prices—may, of course, pass away, though there is too little present prospect of this; but the influence of it has been affecting us long enough to let the world behold how good and how pleasant it is for business brethren to dwell together in unity, and I do not believe that the lesson is ever to be unlearned. Not hap or whim has made combination the industrial fashion of the day, but rigid social laws; nor is there any prospect that these will ever cease to have this effect. Every great industry is destined to take on complete solidarity of organization and to maintain the same in perpetuity.

These monopolies may work society immeasurable evil. Unless somehow regulated, they will certainly so result. The system of combines is not to be held responsible for the doubtful methods and rapacity which some of them have displayed in coming into existence. Rank rebates on freight extorted from railroads, summary methods with competitors and so on, whether justifiable or not, will not continue. Reasonable foreboding points in a different direction.

I ask the reader specially to note, for it is widely overlooked or denied, that when a business comes under the trust form, no mere economic law is going to force it to deal fairly with society. So far as economic law is concerned, it may, and, unless seriously, systematically, looked after, probably will, prove rapacious instead.

When a commodity is produced under trust conditions, cost does not regulate selling prices. This is done arbitrarily for a time, the seller's whim

being perhaps sobered a little by his memory of old competitive rates. Slowly caprice gives way to law; but it is a new law—that of men's needs. In other words, the tolerance of the market now governs price. Prices go higher and higher till demand, and hence profit, begins to fall off, and they then play about the line of what the market will bear much as they used to play about that of cost. The producer can be more or less exacting, according to the nature of the product. If it is a luxury, he may not be able to elevate the prices greatly above the old notch. If it is a necessity, he may bleed people to death. The price cannot, of course, permanently fall below the cost of production; but if the monopoly is close, and the article is one of necessity, it may indefinitely exceed cost. In rare cases this might occur with a luxury. Should fashion create among the wealthy an intense desire for Constantia wine, a pipe of it costing \$100 might sell for \$100,000. Let Constantia become indispensable to life, and the ratio of selling price to cost would be vastly greater than that. This contention is not invalidated by the fact that few, if any, of the combinations now existing, have as yet raised prices up to the full tolerance of the market. There are many reasons why they have not. But that it will be done in due time, provided these powerful embodiments of capital are left unbridled to the play of mere economic law, is as sure as fate.

Trusts threaten the people with a graver evil than that of exorbitant prices—that of apathy toward industrial improvements and inventions and tardiness in adopting such. Competition has been a keen spur to the betterment of methods in production. The danger is that now, so soon as all the production in a given line comes under a single management, old methods will be thought sufficient, and kept in use long after competition would have cast them aside.

To realize the seriousness of this peril we must remember that the present state of things, in which, owing to the existence still, of alert, would-be rivals in their business, even the firmest monopolies neglect improvements at their peril, cannot always last. That mighty motive to improvement must at length cease to act. The evil confronting us will then be not an army of combines, knowing that all sorts of bettered methods are abroad, yet stubbornly refusing to adopt them, but a downright dearth of invention and inventiveness due to lack of incentive. I cannot but think that in this important regard the system of trusts is obnoxious to the same criticism nearly always made against socialism.

Another 'momentous and threatening change must attend the general marshaling of industries in companies and battalions. This marshaling is to bring with it a subordination of men to men, of the many to the few, more complete than has ever prevailed since feudalism. It will introduce, in effect, a new feudalism, with the chance that in the new lords and vassals will be very lacking in the mutual love and sense of mutual responsibility prevalent under the old. Nor does it appear how long a political democracy that shall be more than a name can endure in face of such an aristocratic industrial organization.

Monopoly may work injustice without appearing to do so. The law of monopoly price shows its full significance only when industry is considered dynamically. Whereas a regime of competition inevitably tends to throw into the lap of consumers all the benefits arising from improved processes in production, monopoly tends to retain all these in producers' hands. It may thus come to pass that, even when prices experience no absolute rise, or even fall a few points, they still range far above what they would have been if governed by competition, the producer

pocketing all the gains afforded by new inventions in machinery and methods, whether made by himself or by others.

In a case like this, the circumstance that prices have not risen makes it specially easy to deceive the public. The profits, how exorbitant soever, are not likely to be published; and the fact that they arise more or less at the expense of all of us, since now, though we pay no higher than formerly, we still do pay more than we should have had to pay with competition, is too recondite for popular attention. Press and platform echo the praises of such a monopoly, when it may in fact be a much worse leech upon the body politic than another which, having elevated prices a little absolutely, is deafened with a perfect diapason of anathema. If the lessened cost of the article is entirely due to the monopoly, or to the skill and exertions of those who profit thereby, many will be of the opinion that the monopolists have a right to all the gains thus arising. Massed capital and centralized control are tremendous advantages, and may be made vastly to cheapen production. Ought not those to reap the gains who render possible these better conditions of industry? Ought not society gladly to acquiesce in an arrangement, though perhaps excessively profitable to a few, which furnishes it a given line of products as cheaply as competition ever did? This is a very important ethical question. Its bearings are too manifold for full discussion here. Permit a remark or two, however. Monopolists often utilize, to swell their own dividends, improvements which they had no hand whatever in originating, and of which they have gotten the control by the most doubtful means. To the proceeds of these, society has as good a claim as they.

Again, it seems clear that society's right, whether enforceable or otherwise, to participate in the advantages which the bettered means of production in any department afford, is not cut off at the limit which invention had reached when the mono-

poly was established. Some advancement would surely have been made had competition continued. This would then naturally have accrued to the weal of all of us; and the use of any means to thwart such a result would have been denounced as an infringement of our rights. If that judgment would have been just, the public is justified in demanding at least that share in the present profits of any form of production now monopolized, which would have fallen to it had not the monopoly arisen. Hence, even if we limit society's right in the manner just indicated, the mere truth that a monopoly has not elevated prices, is no proof that its riches have not been gotten in part at the expense of consumers. But I, for one, should not always agree to this limitation of the social claim, since, though an existing monopoly may have effected colossal saving, as much as you please beyond what would have been possible with competition, and may have shared these gains with the public so as to lower prices a little, it does not appear but that a different private monopoly or control by the state itself might have done far better still. Patent rights are limited, however probable it may now and then be that but for the patentee, the improvement would never have been made.

The plea is sometimes interposed that no harm can come to people in general, let monopoly profits be never so high, for the reason that the winners cannot possibly keep to themselves what they get. The wealth cannot remain piled up, it is said, but the very motive which prompted the amassing of it must lead to the spending of it; and this cannot take place without a wide and rich dissemination of its benefits. Such as find comfort in this thought are very easily pleased. The same logic could be employed to justify the creation of financial princes by taxation outright. Any such policy would desperately discourage wealth creation, even if every cent of the vast piles were to be productively spent. The greater part might be invested abroad, profitably for owners,



at little less than dead loss to their fellow citizens. But a generally lucrative employment of so great wealth, either at home or abroad, could not be expected. Excessive incomes, save in rarest cases, however thriftily intentioned their recipients may be, cannot be invested in the wisest manner. But economists are forced to observe that inordinate wealth almost inevitably tends to impair thrift, leading its possessors to prefer unproductive to productive forms of expenditure.

There is hope that combination in industry may, after all, become an immense net of advantage to humanity. While it is unfortunately true that the central control of each great business must dull the old spur to improvements in production, it is to be noticed that combinations open vast possibilities of improvements, which, if another motive to the utilizing of them can be in any way provided, will change the world. In illustration of these new possibilities, I need refer only to the pipe-line system for transporting crude petroleum, the colossal scale on which cotton seed is now pressed, the tank steamers which carry oil across the ocean, the glorious and successful campaign of market-making in which the two oil trusts are engaging in Europe and Asia, and the lucrative by-industries which these, as well as the sugar trust, carry on. For stupendous undertakings like these competition was utterly inadequate.

Combination's benign power in co-ordinating industry is manifest in another sphere. Socialists have said none too much about the destructive cross-purposes and lack of system which of necessity prevailed when production was unregulated. Let the business-man be as careful he may, under the style of business once prevalent, he cannot but take most dangerous risks. Competition offers but the roughest means for ascertaining what the next season's demand for this or that line of goods is to be, and still fainter hints touching the output to be expected from one's rivals. Amid such uncertainty, every year's

operation of a manufactory is to a great extent a game of hazard. Prices fluctuate abnormally, deranging and discouraging industry. Lines of business are overwrought, begetting glut, and necessitating sales below cost; needless plant is set out, which must decay or burn. Losses in these ways are beyond computation, and so much the more sad in that they might be avoided. Through such waste of capital interest arises, and wage-yielding businesses, which might have flourished, are prevented from starting.

The prevention and destruction of wealth in these ways are great enough to make some economists doubt whether the trust system does not, at its worst, effect for society some net saving. I do not think it as yet benefits society thus; but it is very certain that in this matter of haphazard and amorphous production, trusts compass vast economy for some one. They forecast the demand and regulate supply accordingly, much as would occur under socialism. Then, in providing the needed store, massed capital and centralized control offer incalculable advantages over the old go-as-you-please way of producing. That the intrinsic cost of commodities turned out by organized industry is less than it would be under competitive production, no one can deny. The question is, how much, if any, of the saving thus effected finds its way into consumers' pockets. The point for society to aim at is to continue all the advantages of monopoly, increasing them if possible, while preventing the monopolists themselves from going to sleep or retaining more than their just share of what they make. Society wishes to utilize the trust with all its actual and possible economies in production and to devise some means as efficient as competition used to be, for breeding inventiveness and for draining into its own till all the savings of all business, after paying producers the cost of production plus a generous profit.

Three schemes for doing this have been proposed—1, socialism; 2, the assumption by the state of all monopolized production, and 3, regulation. The first (socialism) is simply the system of trusts made universal, all land and productive wealth belonging to the one great, all-inclusive trust, and every citizen being in effect a holder of trust certificates. This plan would be attended with many and insufferable difficulties, which it is impossible to review in this place.

It has also been proposed, in order to secure to society the benefits of massed capital under central management, that the state assume, not, indeed, all industries without exception, but all such as naturally take on the monopoly form. Advocates of this policy usually have in mind businesses like railroads, the telegraph and mines—those, that is, which never have been, and cannot be subject to competition.

Whatever reasons there have been heretofore in a discussion like ours for distinguishing these from the other substantive industries of the civilized world, there is none now. All are or are soon to be monopolized. The proposal now under consideration would, then, practically amount to socialism, which, as just remarked, is not to be thought of except as a fate. I have no doubt, for my part, that many industries now in private hands will sooner or later be bought by the public power, and I would unhesitatingly vote for thus dealing with any one of them so soon as it proved defiant or subversive of the general good. Until this is clearly the case with any given one, regulation should be the method of dealing with it rather than assumption.

Many socialists themselves admit that till men are morally better, grave dangers must attend any enlargement of state participation in industry. That policy gives scope for cheating; it is apt to render workmen indolent; and it narrows the field for invention and other splendid forms of personal initiative. It is not wise then, for the state to undertake

industry faster than this is necessary for public protection. Try regulation in every case until it certainly fails. No systematic effort to regulate monopolies in the public interest has yet been made, except in the case of the railways, and even there the effort is as yet none too serious. We shall become serious in this endeavor soon and carry it further. Nothing would be easier in most industries than to insure the public against wrongs, while at the same time avoiding all injustice to stockholders and bondholders. We should be as careful to do no wrong as to suffer none.

But supposing that we can rely upon the regulation of massed industry by public authority to shield us from robbery in the form of exorbitant prices, where shall we look for that spur to the invention of improved machinery and of processes which has been the glory of competitive industry? And what is going to put such a spirit into the coming feudalism as may render it a blessing, or at least save it from being a curse? Society wants all the good which banded industry can bring it through the agency of great capital and orderly control; but these benefits alone will not compensate for the loss of civil liberty or for the decadence of genius in invention and the initiative. If the new age of industry is to advance humanity instead of causing retrogression, something must come with it that shall conserve freedom and enterprise. If the solidarity of industry is in store, as I believe to be the case, unless it is to bring some such preservative accompaniment, the outlook is gloomy indeed. What can we hope? That is a question which political economy does not answer. It brings us to one of the very numerous points where political economy abuts upon ethics. That the approaching industrial age may carry our dear humanity a step nearer its millenium, moral betterment must come to men. We must have more philanthropy, richer, more solid character, willingness in men to do for love what, hitherto, only money could induce. Nor is this humanity's

embroglio here alone. At every point economic advance, increase in temporal good, waits, in last analysis, upon spiritual advance, increase in moral good.

Let us recapitulate. We have seen that the competitive system of industry is fast giving away to one of combination; that this is not due in any extent to legislation, but springs out of the stringent social laws; that solidarity in industry often exists when it does not appear; that such solidarity is not a transitory phenomenon, but destined to be permanent; that this monopolistic form of industrial organization has in it the power to work society great evil; that it often produces ill consequences without appearing to do so; that there is indeed hope after all of its bringing to society immense net advantages; but that no such happy result can come save on the condition of men's moral improvement.—E. Benj. Andrews (Brown University), in the *International Journal of Ethics*.

## How They Check Useless Litigation in Norway.

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### BOARDS OF CONCILIATION.

Throughout the whole country there are established—in every town and parish—boards of conciliation, with the view of arranging disputes between parties out of court. Every proposing litigant must, as a preliminary step, present his case to the local board of conciliation to whose jurisdiction it belongs, and obtain the board's certificate that the case has been dealt with unavailingly by the board of conciliation, to bring about an amicable settlement between the parties to it, before the case can be prosecuted further in the courts of justice. If a defendant refuses to appear before the board of conciliation in answer to its summons, without lawful excuse, the board certifies the fact and the plaintiff has then free access to prosecute his case in the courts of justice; but in such a case the defendant has to pay all the plaintiff's law costs in the court of first instance, no matter what its judgment on the merits may be. That circumstance effectually secures the attendance of a defendant before the board of conciliation when summoned.

The intervention of the local boards of conciliation does as a matter of fact nip up the great bulk of possible litigation in the bud. According to the lat-

est statistics on the subject at present available—for 1888—the boards of conciliation succeeded in amicably arranging out of court about 88 per cent. of the cases brought before them, leaving thus only about 12 per cent. to be prosecuted in the courts of justice. In 1888 the total number of cases brought before the boards of conciliation was 103,969. Of these 83,315 cases were either withdrawn, conciliated or refused certificate of access to the court of justice; 69,573 cases were small debt cases; 7,886 cases were cases in which the principal claim made was admitted to be correct by the defendant in its material points, and the board of conciliation exercised in them, at the plaintiff's special request alone, its right in undisputed cases to impose a judgment on the defendant; 171 cases were under continuation at the close of the year; and only 12,957 cases were certified for prosecution in the courts of justice.

Broadly speaking, it may be said that every case that arises—except criminal cases, the subject of public prosecution—must be presented, in the first instance, to the local board of conciliation. The plaintiff and defendant must appear in person before the board of conciliation, unless lawfully excused, in which case they may appear by a deputy who must be provided with a written mandate authorizing him to bind his principal to any settlement of the disputes that may be arrived at. Practicing solicitors, or any one in their employment, are disqualified from acting as deputy or appearing for another before the boards of conciliation, except in the special case of being the mandatory of a foreigner residing out of Norway.

The expense of submitting a case to the board of conciliation is a perfect trifle. The costs are 10 1-2d. fee for the summons to defendant to appear before the board, a court fee of 10 1-2d, payable by the plaintiff when the case is heard, to which is added a second court fee of 10 1-2d, payable by the defendant in the event of an amicable settlement of the dispute being

arrived at by the board's conciliating offices. Of course the terms of a settlement may include a different distribution of these fees.

The 88 per cent. of the cases referred to above were therefore amicably and finally arranged out of court by the intervention of the boards of conciliation and settled speedily without any litigation whatever, at an expense of 2s. 7 1-2d. each case.

Solicitors appear on the scene after (not before) the boards of conciliation have dealt with the case. Until then they are entirely muzzled. The existence of the touting solicitor, or of a solicitor who takes up a case on speculation, is made impossible; and, further, a defendant is efficiently protected from a plaintiff who speculates on worrying him into a payment to compromise or settle a trumpery or trumped-up claim.

Even the small fees stated above are only chargeable to people to whom it would be no hardship to pay them. A poor plaintiff or defendant to whom it would be a hardship to pay the fees, small as they are, is entitled to all the benefits of the intervention of the boards of conciliation without any charge whatever. The millionaire and the pauper stand on exactly the same terms as far as the merits of the case submitted are concerned; the millionaire has his wealth recognized in the matter of payment of the fees, and the pauper has his poverty recognized in the same manner by being charged no fees. The millionaire must stand or fall on the merits of his case there, before the board of conciliation, without any assistance from solicitors skilled in the cunning of law craft.

The general expenses of the boards of conciliation are paid out of the county rates and the fees collected go into the commissioners' own pockets, otherwise the position of a commissioner of a board of conciliation is an honorary one.

The boards of conciliation have, strictly speaking, not a judicial function, and cannot compel a plaintiff or defendant to accept their view of the merits of a



case presented to them; but in a special and large class of cases, such as small debts, where the principal sum is admittedly due and where dispute, if any, is confined to side issues, such as rate of interest on the debt, terms of payment, etc., the boards may, in cases not exceeding 500 kroner in value (about £28), arbitrate on the issues in dispute, on the plaintiff's special demand to do alone, and impose on the defendant an interim judgment, which becomes absolute unless immediately appealed to the judge of the court of first instance. With the consent of both parties to a case, the boards may act as arbitrators; as such, assume a judicial function. In such a case, the board's judgment is final, and is unappealable, except on a technical ground. An ordinary case that has been amicably arranged before the board of conciliation is also finally settled with all the effect of a judgment as soon as the terms of the settlement are entered in the board's minute-book, and subscribed by the parties, the commissioners acting as witnesses. Such a settlement is absolute and unappealable.

Every town has its board of conciliation, and every parish throughout the country has its local board, and if of very great extent, may have more than one, as the law under which the boards exist provides that as a rule no man shall be compelled to travel more than about twenty-eight English miles to reach his local board of conciliation. The boards meet for the disposal of cases once a week in towns and once a month in rural districts. They sit *de die in diem* until all cases in which summonses have been issued have been called and heard, finally disposed of or continued for a stated reason accepted by the board as good and sufficient, but only with consent of both parties; and a case can only be continued once, and must be finally disposed of at the board's next meeting.

The boards of conciliation consist of two commissioners, who are elected by popular vote. Solicitors are ineligible. The commissioners are always

gentlemen of undoubted probity and the highest local standing. They are nominated for election by the municipal council in towns and by the parish boards in rural districts. The localization of the boards, the mode of appointment and intimate local knowledge of the commissioners secures that, as a general rule, the commissioners have some personal acquaintance or knowledge of the parties who appear before them with their disputes—their private characters and circumstances—a knowledge which is invaluable in promoting successful efforts of conciliation. The commissioners are elected to serve for three years.

All cases brought before the boards of conciliation are heard in the strictest privacy, no others than the plaintiff and defendant being admitted to the presence of the commissioners. Having to appear in person, it very frequently happens that a plaintiff and defendant, when brought face to face with each other in the ante-room, while in attendance waiting for their case to be called, come to a settlement at the last moment between themselves, so that, when called before the commissioners, all that remains for these gentlemen to do is to bind the parties to the terms of the settlement by a signed entry in the board's minute-book.

Besides the simplicity and costlessness of the proceeding before the boards of conciliation, there is also great speed in arriving at a settlement or in getting a case certified for prosecution in the courts of justice. A summons to appear before the board of conciliation need only have one clear day to run in towns, and four clear days in a rural district, before it must be answered, and when the case is called it must be disposed of, unless adjourned with the consent of both parties, and it can only be adjourned once, for a special stated reason, approved of by the commissioners and only till the board's next meeting. It must then be finally disposed of and be amicably arranged, dismissed or certified as competent for proceedings in the courts of justice.

The advantage of boards of conciliation is so well understood and appreciated in Norway that it is a very common thing for the banks, in certain classes of their transactions, or when people generally enter into a contract of any kind, that they insert an article into their contracts providing that, in the event of disputes arising, the parties to the contract bind themselves to accept and abide by the judgment of the local board of conciliation, the commissioners being in that case empowered to act as arbitrators, and their judgment as arbitrators acquires all the force of the judgment of a court of justice and is unappealable except on a technical ground.—National Observer.

## A Year's Trial of the Eight-Hour Day in England.

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An experimental trial of the eight-hours day was twelve months ago undertaken by Messrs. Mather and Platt, at the Salford Ironworks. Mr. William Mather, M. P., is about to issue a report on the trial year. It is exceedingly interesting to learn that the experiment has been entirely successful, and Mr. Mather in his statement expresses the hope that the employers in the engineering and machine-making trades will give the ascertained results the fullest consideration, with the view of making the forty-eight-hours week universal throughout the industry.

### CONDITIONS OF THE EXPERIMENT.

The introduction sets forth the conditions under which the experiment was tried. The same wages were to be paid for the forty-eight-hours week as for the fifty-three-hours week, and the desire was to arrive at conclusions trustworthy on the part of all, whether employers or employed, who are engaged in the engineering and machine-making trades of the country as to the soundness or otherwise of such a step. The issue to be determined was whether the widespread desire for shorter hours

might be met without danger to the mechanical trades, or whether it must be resisted in the interests of all concerned.

To arrive at conclusions of universal application from such a trial, Mr. Mather says, it was necessary that the conditions should be such as actually exist in the great majority of manufacturing concerns in the United Kingdom. It was also necessary that the trial should be made at a works of such capacity as would exclude the possibility of specially-selected men being employed. The full complement of men at the Salford Ironworks is 1,200, though the actual number employed at any given date necessarily varies according to the state of trade. The trades represented at the works are pattern makers, moulders (iron and brass), smiths, coppersmiths and tin-plate workers, engine-fitters, millwrights, electrical mechanics, turners and fitters, brass-finishers, boiler-makers, planers, drillers, borers, machine-tool men, and laborers. The character of the work turned out during the year of trial was similar to that of the preceding six years—namely, general engineering work, in which are comprised engines, pumping machinery, boiler-work, etc., machinery used in the textile trades (other than spinning and weaving) for the bleaching, printing and finishing of cotton, linen, silk, and other fabrics; electrical machinery of every variety, for lighting, transmission of power, electric traction, electro-depositing, electro-chemical processes, etc.

The year's trial was made during a period of general trade depression; but, fortunately for the purpose in view, though the prices obtained for the output of the concern were lower in the aggregate than were ever reached before, the total invoice value of the orders executed during the year amounted to the average value of the six preceding years. This was an unfavorable state of things for

the success of the new system, because, with five hours less of work per week, without a reduction of wages, and with the prices for machinery lower than in any preceding year, it was to be expected that the ratio of labor-cost to selling-price would be abnormally high. All the productions of the works are subject to the keenest competition both in the home and in foreign markets. No monopolies of any kind have been included in the year's trial, and the royalties included in the prices of special inventions have been deducted in all cases, and only the prices of the machine itself have been taken for the purpose of the comparison. Every element which might render the experiment doubtful as to its general application as a test for the whole engineering and machine-making trade has been eliminated. About one-third of the men employed are on piecework wages, and the piecework system has received a thorough representation in the trial, as well as the fixed-weekly-wage system. No overtime whatever was worked, except for breakdowns and repairs. Extra men were employed on the double-shift plan to meet extra pressure of work. The only preparation made to give the trial "a fair field and no favor," was an earnest appeal to the foremen in the various departments to exercise forethought and vigilance steadily through the year in forwarding the work from process to process, to furnish materials well in advance, and to provide such simple facilities and workshop conveniences (not new tools) as might be suggested by the men, especially the piecework men, from time to time. Such facilities, however, have not amounted to an appreciable sum, though they may have been very helpful to the men. Every employer would be only too glad at all times to receive such suggestions, and adopt them.

An essential detail was that the accounts of cost and production should be kept with scientific precision and care. A very competent engineer's ac-

countant was deputed to undertake this important task, and Mr. Mather vouches for the absolute correctness and trustworthiness of the results recorded in the report. An important feature of the trial was that it was formally arranged with the chief officials of the Amalgamated Society of Engineers, the great trade-union of the engineering and machine-making trades of the United Kingdom.

### RESULTS.

The statement of the results may usefully be quoted in full:

**Wages-cost.**—The figures we have taken as the standard with which to compare results are the averages per year of the preceding six years, during the earlier portion of which the number of hours worked per week was fifty-four, and fifty-three hours per week during the later portion. The production during the two periods has been similar in character, and the turnover in the trial year has approximated to the average of the six years so closely as to be practically the same. As regards quantity of production, there was actually a larger output in the trial year; but, owing to the prices in that year being considerably lower than in the six preceding years, the turnover did not increase with the amount of production. The fact must be borne in mind in studying the following statement as to the cost of wages: On making up the books we found that, comparing the ratio of wages to turnover in the trial year with the ratio of wages to turnover in the six preceding years, there was an increase of 0.4 per cent. in the former. But as in the trial year selling-prices were considerably lower, the actual quantity produced, as represented by the equal turnover of that year, was considerably larger than in the six preceding years; therefore the ratio of the cost of wages to the turnover in that year must have been proportionately less. Had prices

ruled the same the turnover in the trial year would have been greater, and the wages-cost, instead of showing an increase of 0.4 per cent., would have shown a decided decrease. We have given no credit for this fact to the side of the trial year, but show the actual result as given on the comparison we have instituted—viz., an increase of 0.4 per cent. in the ratio of the wages-cost to the turnover. This, however, does not exhaust the changes made by the reduction of the hours. We have had to discover what other advantages and disadvantages have arisen from it. The question of saving in consumables on the one hand, and the greater load of fixed charges on the other, have been the subject of close investigation. We have found a marked economy in gas and electric lighting, wear-and-tear of machinery, engines, gearing, etc., fuel and lubricants, and miscellaneous stores. On the other hand, we have examined the increased fixed charges due to interest of plant and machinery, rent and taxes, permanent staff on fixed salaries, being employed five hours less per week. The balance of debtor and creditor account on these expenses is unmistakably in favor of the trial year. The credit from these items to be carried to the trial year is an amount equal to 0.4 per cent. on the net amount of the year's turnover. Thus, by a remarkable coincidence, a saving of 0.4 per cent. is secured as a direct consequence of the shorter hours, which counterbalances the debit of 0.4 per cent. in the increased wages-cost.

**Lost Time.**—The improvement in respect of lost time is very marked. The proportion of "time lost without leave" to the total time worked averaged in the fifty-three-hours period 2.46 per cent., whereas in the forty-eight-hours period it is only 0.46 per cent. The lost time, of course, represents a serious diminution in the year's production, and a proportionate loss on the fixed charges of the concern. There are also other losses resulting from time lost.



For instance, when a man is one of a "gang" his absence unexpectedly causes all his mates to lose more or less time in starting, and there is a general temporary dislocation of the work with which he is connected. It is probably not too much to assume that this resulting lost time—for which an employer has to pay—is at least equal to the time lost by the man himself. Whatever saving or benefit there may be under this head is latent. No account is taken of it in the figures worked out. There can be no doubt, however, that it has had an important effect on the general result.

Piecework.—Piecework from the first has been a matter of considerable interest. It was at the outset—perhaps naturally—assumed that men on piecework were already doing their best, and if their period of work were shortened their earnings would be diminished in a corresponding degree. This anticipation has not been realized, for, although there is a falling-off in the percentage earned by pieceworkers over and above what they would have received as day-wages, it is slight in comparison with the reduction in the time and particularly so in the latter portion of the year. In order to judge better of the working-out of the system as regards piecework, the year has been divided into three parts of approximately equal lengths. In the first period the surplus over daywork rates was 1.76 per cent. less than the standard piecework wages; the the second period, 1.58 per cent. less than the standard piecework wages; in the third period, 0.78 per cent less than the standard piecework wages; the average for the twelve months coming out 1.41 per cent less than the standard. These figures show that as the year advanced there was a steady adaptation to the altered conditions, and it is reasonable to expect that the small difference remaining at the end of the year will soon disappear. It must also be noted that in no single instance during the year

were piecework rates advanced. In fact, some reductions were made—in a few special cases where the rates were admittedly too high. Had these few changes not been made the difference between the two periods would have been 0.5 per cent. only, instead of 1.41 per cent., a difference which is not at all unusual between two years, as slight fluctuations in piecework earnings have occurred from one year to another under the old system.

The chief points of interest arising out of the comparison made between the two periods for wages-cost of work produced may be thus epitomized:

	In favor of 48 Hours Per Cent.	Against Per Cent.
Comparison of wages to turnover, made simply on the net value of production, and the wages thereupon.....		0.4
Balance of account for wear and tear, fuel, etc., as against increased cost per hour worked for fixed charges, which must be credited to wages account.....	0.4	
Proportion of lost time to total time .....	2	
Difference in the amount of piecework production, as shown by piecework balances in three periods of the year—		
First period.....		1.76
Second period.....		1.58
Third period.....		0.78
Difference of pieceworkers' earnings after equalizing prices for fair comparison with preceding years for the whole trial year.....		0.5

It will be clear from these figures that the wages-cost of production in the forty-eight-hours system remains the same as it was under the fifty-three-hours system, when the new system is credited with the saving in consumables, wear-and-tear, fuel, etc., which is the direct consequence of the change without diminishing the output of the works. The pieceworkers have lost slightly on the year, but the later months show this loss to be a vanishing quantity. A curious fact is illustrated by the piecework-

ers' statistics. The diminution in their total wages means a proportionately less production in actual work turned out by them. But, as the total output of the works during the trial year was greater than that of the previous years, the diminution in the production of the pieceworkers must have been more than compensated for by extra production on the part of the day-workers.

#### COMMENT ON THE RESULTS—ACTION OF THE TRADE.

Dealing generally with the results above described, Mr. Mather remarks:

"The Amalgamated Society of Engineers and kindred trade unions have acted with prudence and patience, as they pledged themselves to do, during the year's trial we have made. They are entitled now to raise the question for general consideration, and to recommend the universal adoption of the system we have proved to be safe as regards the interests of employers, and beneficial to the workmen.

It is twice bless'd:

It blesseth him that gives and him that takes.

The cry for legislation to settle the conflict between the natural and laudable aspirations of workingmen and the fears and doubts of employers is a danger to the whole field of industry.

"Mutual responsibility and mutual benefits can only be secured by mutual arrangements. A rigid law passed by members of an Imperial legislature, whose votes are often given haphazard, or for party reasons, or for 'a safe seat,' can never provide a remedy for such conflicts as those which arise in the industrial world in connection with the complex questions of wages and hours of labor. There are, of course, simple questions of protecting some workpeople in dangerous employments or unhealthy occupations which may require the state to assume

the responsibility of prescribing the limit of hours per day during which adult men may be exposed to such conditions. But the great manufacturing industries of the country, as a whole, if they are to become secure and prosperous, must be conducted by arrangements mutually planned and carried out by the trade-unions and the employers, and any legislation which would promote and strengthen such arrangements would be wise and may be necessary.

"The workpeople of the great engineering and machine-making trades have a splendid organization. I feel sure its prudence and sagacity will be shown in dealing with the aspirations of its members to bring about a universal forty-eight-hours week in such a manner as to avoid friction with the employers. We have now an opportunity of showing the workpeople and employers in other industries how beneficial changes may be made by mutual arrangements instead of by rigid legal enactments.

"It is a notable and significant fact that a great trade-union has, in the midst of the general agitation for shorter hours, calmly and patiently waited for the result of a crucial trial, the making of which it encouraged, before giving the slightest sanction to any appeal being made to employers generally. Surely such a mode of dealing with this important question can be universally adopted in all trades. The peculiarities of each can thus be specially met, while the continuity of industrial development and success is secured.

"There is no doubt that the results obtained at the Salford Ironworks, together with those at other places, demonstrate that the two morning hours before breakfast are not worth the pains and trouble they cost, whether to workpeople or to employers. The effect on the workpeople must be most damaging both physically and morally; otherwise we cannot account for the remarkable and indisputable

fact that when these hours were struck off as much work was performed all the year round as when these hours were employed. Not only are these two hours before breakfast almost worthless as time, but their effect on the physical and mental condition of the men is to depreciate the vigor, freshness, and brightness which ought to prevail throughout the working-day if the best results are to be obtained.

"My observations, and the careful supervision of our foremen (whose opinions on the experiment are given in a summarized form in the appendix), have not detected that our workpeople have consciously made anything like 'a spurt' in the trial year, hoping thereby to gain a permanent reduction of hours, with the intention of easing off afterwards, as some have thought would be the case. A year is a long period to keep up 'a spurt.' It would, in fact, be impossible to sustain a conspiracy of endeavor so long if any strain accompanied it.

"I attribute the full maintenance of our production through the trial year solely to the unimpaired and cheerful energy on the part of every man and boy throughout the day. We seem to have been working in harmony with a natural law, instead of against it, as in the unnatural conditions of men beginning the work of the day without the provision required by nature for the proper exercise of their mental faculties and physical powers.

"The changed home life must also count for something. Every man can now associate with his family before leaving for the day, and the breakfast table may give him a good 'send-off' in a cheery spirit, which he maintains in all he does.

"The total abolition of overtime, excepting in the rarest cases, is essential to the success of the shorter hours, if my conclusions as to the cause of increased production be correct. This custom is a delusion on the part of workpeople and employers alike. The extra wages are obtained by the men at

too great a cost. The extra work is not worth to the employers the price they pay for it. The double-shift system, which the trade-unions have readily approved, has, on the other hand, many advantages in cases of exceptional pressure. Employment is afforded thereby to more men, and the work they do is not charged at an abnormal rate. It would doubtless be difficult to obtain sufficient men for a double shift in times of great prosperity; and as a permanent system of working it is, of course, impossible. It will simply meet certain emergencies. The true means for larger production is increased producing power in men and machinery. But of this I am assured, that the most economical production is obtained by employing men only so long as they are at their best. When this stage is passed there is no true economy in their continued work. Our year's trial has convinced us that we have found the 'happy medium' in the number of hours during which only one meal and one stoppage are needed, and this resolves itself into the eight-hour day or forty-eight-hours week."

## Baron Hirsch's Colonization Scheme.

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Reports have been received from Mr. Gastrell, her majesty's consul at Buenos Ayres, on the subject of Baron Hirsch's colonization scheme. The first purchases of land were made in 1891. Nine square leagues were acquired for the colony of Mauhico, in the province of Buenos Ayres, and four and a half square leagues for Moisesville (the name is open to criticism), in Santa Fe. Three more colonies were afterwards founded, and at the present time the association possesses sixty-three square leagues of land, most of which is situated in the fertile province of Entre Rios. The land has cost them about £220,000, out of the total expenditure to date of twice that sum, and only about one-third of this property has yet been colonized. Batches of colonists have been arriving since June, 1891, and the total number now settled is estimated at about 6,300—mostly from Southern Russia. The rumors which reached England of the ill-success of the scheme were, no doubt, due to the fact that a large number of useless ne'er-do-weels had managed to get themselves included among the first arrivals. These men had to be got rid of, and their return to Europe would, of course, tend to produce the impression that the enterprise was a failure. But the greatest care has since been exercised in the choice of colonists. The Russian government has adopted

a benevolent attitude towards the undertaking, and there is a central committee at St. Petersburg, with branches all over Russia, whose business it is to select the most deserving Jews as emigrants. The association gives to each family—families of about seven persons, including children, are found to succeed best—some 190 acres of land, eight or twelve oxen, two plows, harrows, and a house and food until the crops are harvested; after which the colonists have to support themselves. The latter certainly cannot complain of ungenerous treatment. In 1893 the association handed over to them three-quarters of the whole crop—an unusually abundant one. The land eventually becomes the property of the colonist, but until his debt is paid off a payment of “only so much as each family or individual can afford” is required of him by the association after each harvest. The assessment of this amount must be one of the most difficult of the duties falling upon the “resident collectors” appointed to each colony. These duties are of various kinds. Besides supervising the harvesting, and determining what yearly payments must be made by each colonist in part settlement of his indebtedness, they have to “look after the property of the association, to distribute the food supplies to each farm, to act as the legal representatives of the association in all dealings with the local authorities and private persons, and, later on, to collect the debts due by the colonists to the association.” Baron Hirsch seems to have been very successful in the choice of agents, and the success of the undertaking must be to a great extent due to their tact and energy. The colonies are managed generally by a director and his staff. Under them is a carefully-organized system of local self-government. Each colony has its council, the members of which are in part appointed by the association—the “controller” is, of course, a member—and in part selected by the immigrants themselves. The



council regulates all matters connected with the distribution of machines, transports, building, public health, etc., and "determines the work that each colonist has to perform." All this reads like the government of one of the ideal republics so often dreamed of, and so impossible to carry out in practice. Not only is it carried out, however, but the colonies seem to be in a fair way to become paying concerns. A return of at least 7 per cent. was confidently expected from the wheat crop of 1893. No fewer than 17,240 acres are under wheat, and this—calculated on the basis of the previous season's prices, which were exceptionally low—represents a value of £30,000, a return of 7 per cent. on the capital so far invested. When it is remembered that with few exceptions these Jews are drawn exclusively from towns, and have to be taught the rudiments of agriculture on their arrival, the success of the scheme becomes the more surprising. Perhaps it is too early as yet to regard this success as complete, for the oldest of the colonies was only founded about three years ago. But it is at any rate certain that out of the most unpromising materials Baron Hirsch and his associates have succeeded in creating a very promising body of colonists, and have so far done something towards the solution of one of the most difficult problems of the present day—what to do with the surplus Jewish population of Russia without disorganizing the labor market of the world.

## State Farms.

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From the Report of the Department of Labor—New Zealand.

The Hon. Mr. J. McKenzie, minister of lands, has successfully initiated a system of paying parties of working men to fell bush on crown lands, giving to these men the option of choice of lands so felled and cleared. In several places, as at Pemberton and Chasland's river, the scheme is working well, and small thriving communities have been established. They are already asking for school houses to be erected, and showing other signs of permanent occupancy. The system at first adopted was to fell and clear bush on several parts of the future settlement, and then allow the men working thereon to ballot for the sections. This was found to be unsatisfactory, as the ballot sometimes resulted in giving a man a piece of land to which he had taken a dislike, or which was unsuitable to the conditions and number of his family. The later system adopted is to have the land roughly surveyed into sections of from 100 to 500 acres, the lots being shown by short side-lines starting from the frontage of roads already surveyed and definitely fixed. Each man, knowing approximately the position of his boundaries, can go on clearing for himself until the permanent boundaries are marked off. The acreage is not rigidly kept to round numbers, but is fixed so as to suit, as far as possible, the needs and wishes of the occupier.

A state farm proper of about 1,000 acres has been commenced at Levin, on the Manawatu railway line, Wellington provincial district. Fifty-two men, eight women, and twenty-five children are on the ground, the men doing the preparatory work, cutting roads through the forest, felling bush for burning, planting orchards, etc., getting ready for the permanent homestead to be laid out. Another farm, to the south of Dunedin, has been selected and marked off, but it is as yet in its infancy. The men employed on the state farm (and to be employed) are engaged on the co-operative system, and are not paid wages except in rare cases, where contract is inadmissible.

The workers generally are elderly men, drafted off as to a depot, where their services can be utilized until suitable work for them can be found, if desirable.

The manner in which the work is contracted for is as follows: The manager names a price per chain for some fencing, and some half-dozen men group themselves and take it by contract at that price. Again, if the manager requires an acre of land dug over with the spade, or firewood cut and stacked, or drains dug, for any of these things he names his price, and the workers accept it if content. As the manager learns by experience the working abilities of the men, and is instructed to offer them a price which will insure an equivalent to a fair wage if worked at steadily, the men generally accept. Of course, continual refusal to accept work at a fair price would necessitate the removal of the discontented person from the farm. The families on the farm, if arriving destitute, are provided with tents, etc., by the government. They will not have to pay any rent, but have to erect cottages for themselves with some small state concessions as to timber obtained on the spot. Each family has a half-acre allotted to its occupation for garden and domestic purposes. On a family leaving the farm an allowance

will be made for improvements made under the approval of the manager. This institution is by no means at present a self-governing experiment in any way. Those who wish to form such societies must do so in their own manner by means of special settlements, etc.; but the state farm is directed by an able agriculturist as manager, who is appointed by the government, and who has all the powers of an ordinary employer in arranging the details of his work, subject to his responsibility to the department of labor, and in consonance with the co-operative system.

It is the intention of the government, when, after some years, the farm has been cleared of bush and brought under skilled cultivation, to make its working purely co-operative. By that time sufficient knowledge will have been gained as to the character of the men and their families to act as a guide in determining who are to be the permanent residents. The idle and incapable will have been weeded out, and it will be possible, doubtless, to allow the farm to be worked for their own profit by a committee or council of those who have been employed for a long period. In the meantime, it is to be hoped that other farms in the rough state can be acquired and brought into good order on the same system. They would prove of service not only as outlets for the relief of the temporary congestion of the labor market, but for the permanent settlement of families to whom town life offers neither livelihood nor inducement.

There is every probability that the state farm will become a paying investment on the capital expended, as well as an outlet for a description of labor—viz., that of elderly men—which cannot find occupation elsewhere in times of pressure, but which has deserved well of the colony by previous long and hard service.

## England's Labor Commission.

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To inquire into the causes for the impoverishment of the workers, and to suggest remedies therefor.

The Minority Report, signed by Mr. Michael Austin, M. P., Mr. Mawdsley, Mr. Tom Mann and Mr. W. Abraham, M. P., reads as follows:

"Probably two millions are every year driven to accept poor-law relief in one form or another. In London, the wealthiest and most productive city in the world, we learn from Mr. Charles Booth's researches that 32 per cent. of the total population falls below the 'poverty line'—the guinea per week of regular earnings, below which no family can live in decency and health. And when we find that in certain districts of the metropolis one-half and even three-fifths of the entire population fall below that minimum, and that this state of things arises from no exceptional distress, but represents the outcome of fifty years of steady improvement, we cannot but regard the situation as calling for the gravest consideration of the government. Nor is this destitution confined to unskilled or specially degraded classes of workers. Even in those grades in which labor is better paid, the statistics of the labor department show a large number of competent workers are at all times out of employment, whilst in periods of trade depression many thousands of men are in the same condition."

The minority demand the abolition of sweating, the adoption of the eight-hours day at once in all government departments, an immediate eight-hours law for miners and textile workers and a provisional scheme for extending eight hours to other trades in the following manner:

"We recommend that an eight-hours act should be passed laying down the principle of a maximum working day, and authorizing its application to particular industries after due inquiry, by orders similar either to those made under the factory and workshop acts, or to the provisional orders laid before Parliament on other subjects. Under such an act the home secretary, pending the creation of a minister for labor, might be empowered to direct inquiry to be made into the hours of labor of an industry when called upon to do so by a resolution of either house of parliament, or any town or county council, or by the trades council of any town in which industry was carried on, or by any registered trades union or employers' association in the trade concerned."

An extensive reform of the system of factory inspection and the creation of a special minister of labor are suggested, with many other reforms. The conclusions of the minority are summed up in this forcible passage, with which we conclude:

"To sum up, we regard the unsatisfactory relations between employers and employed as but one inevitable incident of the present industrial anarchy. The only complete solution of the problem is, in our opinion, to be found in the progress of the industrial evolution which will assign to the 'captains of industry,' as well as to the manual workers, their proper position as servants of the community. Meanwhile, the relations between capitalists and manual workers are enormously embittered by the demoralizing conditions in which great masses of the population are compelled to live. Under any conceivable view of social development, these conditions demand the serious attention of the government and con-

stitute, in our opinion, the most pressing of all the problems of statesmanship. The evil influence of the 'sweated trades,' the demoralizing irregularity of employment, the insanitary condition both of the work-places and the homes of large sections of the community, the inadequate wages obtained in all the less skilled grades of workers, the excessive hours of labor which prevail throughout so large a part of the industrial field, all call for immediate action.

"We think it high time that the whole strength and influence of the collective organization of the community should be deliberately, patiently and persistently used to raise the standard of life of its weaker and most oppressed members. We regard this as one of the primary functions of democratic government, whether national or local, and while leaving on one side, as beyond our scope, such fundamental matters as the nationalization of the land and the drastic taxation of unearned incomes, we have suggested in some detail various immediately practicable reforms in this direction. These reforms include—

"(a.) The explicit and widely advertised adoption by the government and all local authorities of direct public employment whenever this is advantageous, the eight-hours day, trade union conditions, and a moral minimum wage.

"(b.) The extension of the factory and similar acts to all manual workers in all trades, and their drastic enforcement in such a way as to discourage home work, and absolutely to prohibit industrial oppression.

"(c.) The securing, by appropriate law, of an eight hour day for every manual worker.

"(d.) The thorough investigation and bold experimental treatment of the problem of the unemployed.

"(e.) The provision of adequate sanitary housing accommodation for the whole nation, as well as honorable maintenance for all its workers in their old age.

"In short, the whole force of democratic statesmanship must, in our opinion, henceforth be directed to the substitution as fast as possible of public for capitalist enterprise, and, where this substitution is not yet practicable, to the strict and detailed regulation of all industrial operations, so as to secure to every worker the conditions of efficient citizenship."—Daily News, 1st May, 1894.



## The Philosophy of Mutualism.

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From an article in the *Arena*, by Prof. Frank Parsons, on "The Philosophy of Mutualism," we make the following extracts:

It is clear, in the first place, that the social ideal must be co-operative and not competitive. Love requires harmony. Competition involves antagonism—antagonism is its very essence. It is impossible for one to love his neighbor as himself so long as he has to fight with that neighbor for bread and butter. Nor does it stand the test of manhood any better. Competition does not even aim to produce noble manhood. It utterly neglects the production of manhood in its eager pursuit of merchandise. Its political economy does not know that manhood is the supreme product of an industrial system; it does not know that manhood is the most important factor even in the production of that material wealth about which it is so solicitous. The competitive system expends the utmost possible care upon engines and dynamos and all its machinery of steel and brass, but on its human machinery, which contains whole worlds of undiscovered science and invention—the soul that vitalizes the steel and brass and determines their productivity—upon this no care at all is bestowed. Manhood is made the slave of machinery instead of its master. Thousands of children, tens of thousands of men and women, spend their whole lives in feeding, cleaning, and ministering to these

great, dumb, beautiful monsters that have usurped the throne of our civilization in the interest of a few cunning men who contrive to keep the favor of the monarchs of the nineteenth century.

Competition necessarily evolves the character product appropriate to antagonism—hardness, cruelty, cunning, injustice, oppressiveness, overbearing selfishness in the victors; fawning slavishness, cruelty, deceitfulness, viciousness, abject selfishness in the victims. The tendency of competition is to undo all that religion, ethics, and law are trying to do for the ennoblement of man.

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In round numbers there are to-day in this country twenty millions of workers, including the women who put in long, serviceable days in our homes; and the total wealth product each year, in agriculture, manufactures, transportation and distribution, labor of doctors, lawyers, ministers, actors, domestics, etc., the total wealth product in goods and services, is about twenty billions each year, or \$1,000 per worker. This is the new product due to the labor of the year—the net product after deducting repairs and materials. Now, one million workers are wholly idle, and wage-earners as a body are idle about one-tenth of the working days in a year, on an average, equivalent to nearly two million idle the whole year through, which, added to one million absolutely idle, makes idleness cost us three million times \$1,000, or three billions a year. There are ten millions more, mostly women, who spend their time shopping and flirting, of whose capacities society does not avail itself. They would be happier if they had something useful to do, and the world would gain another ten billions of service.

Look again at the loss due to insufficient education of workers—physical, industrial, intellectual, and spiritual education; the loss due to poverty and the poor food and low grade of life it frequently

brings; the loss due to non-interest in profits. We all know how much energy it adds to a man if he owns the business or comes to be partner in it. When the Pillsbury Flour Mills of Minneapolis gave their men a share in the profits, the energy, care, and economy of the men so greatly increased, that, after subtracting the \$40,000 of profit that went to the men (an average of \$400 to a man, or 33 per cent. on their wages for the year), the part of the profits that went to the firm was more than the total profit it had by the old pure wage system. That was also the experience of the Le Clair shops in Paris, and it is always the case where profit-sharing or co-operation is thoroughly tried under true conditions, as any one may see who will consult W. P. Gilman's history of "Profit Sharing." The men work with more spirit and diligence. They do not stop the moment the bell rings, nor wait for its stroke to begin; they economize; they take better care of materials; they do the best work they know how, for the firm's reputation is of moment to them. They watch each other; shirking and drunkenness become impossible, for the men say to each offender: "Look here, you must stop; you are spoiling our profits;" and drunkenness ceases where sharing of profits is carried out. Superintendence also becomes unnecessary; the men superintend themselves and each other. At a minimum estimate we lose half the power inherent in the wage-earning masses. If all were well fed, well educated to bring out their talent, ingenuity, and skill, to perfect their character and keep them from bad habits and disease, comfortable, hopeful, happy partners in the business of the world, the efficiency of labor would be doubled at the least; so we lose twenty billions a year on this count.

Pernicious activities: The saloon\* takes one billion of dollars a year from the people—a billion far worse than thrown into the sea—and the labor and

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\*Anglice, publichouse.

capital involved in the traffic, if put to real use, would add a good billion to the wealth of the country instead of constituting a machine for subtracting a billion from that wealth—a gain of two billions a year by destroying the saloon. Another two billions would be realized if gambling, lobbying and other fraudulent employments were abolished, and two billions more if the litigation, disease, and crime consequent on competition could be avoided.

Look a moment at the item of useless activities: The drummer\* system costs more than a billion a year; in a co-operative commonwealth it would not be required, and the labor and capital involved could be used for some positive gain. In my native town there are twenty-five grocery stores for four or five thousand inhabitants, and, in Boston, a thousand groceries. Yet a single co-operative plant, with a good delivery system, a central depot, and a few sample rooms to exhibit new articles, or those that vary in character, would be able to do the whole work. Think of the saving, not only in selling but in purchasing, that would result from a co-operative system dispensing goods of a reliable quality at low and uniform prices. Look at the crowds of women who throng our streets going from store to store among the three hundred dry goods dealers of Boston, hoping at each new place to find something more to their taste in quality or price, and ending, perhaps, as the old couplet has it:

A spool of silk and a hank of thread,  
Eight hours, ten cents and a dame half dead.

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Men were found in the sweat shops of New York working sixteen hours a day for eighty-nine cents a week and board—real board, with scarcely anything on it to obscure their view of it. Many a man gets less than \$1 a day, while Vanderbilt's cook gets \$10,-

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\*Anglice, commercial traveller.

000 a year, and Wannamaker's advertising agent left the ministry to become a writer of puffs, and receives more for his work than the noblest preacher in Boston is paid. An actress comes over the water, presents some demoralizing dramas, and takes \$50,000 profit in one week from our city. A pugilist makes \$50,000 in a single evening; a lawyer receives \$100,000 in one fee for a case he ought to be ashamed to have anything to do with; a railroad gambler (according to the New York dailies) clears thirty millions in a year; and a college president is given two or three thousand a year—which illustrates the relative value our civilization places on education, as compared with gambling and pugilism.

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Daniel Webster said: "The freest government cannot long endure where the tendency of the law is to create a rapid accumulation of property in the hands of the few." Henry Ward Beecher said, in 1881, that five or ten men controlling ten thousand miles of railroad and billions of property would have their hands on the throat of commerce, and "if they should need to have a man in sympathy with them in the executive chair, it would only require five pockets to put him there." With keen prophetic vision, Lincoln said, at the close of the war: "It has been indeed a trying hour for the republic; but I see in the near future a crisis approaching that unnerves me, and causes me to tremble for the safety of our country. As a result of the war corporations have been enthroned, and an era of corruption in high places will follow, and the money power will endeavor to prolong its reign by working on the prejudices of the people till all wealth is aggregated in a few hands, and the republic is destroyed. I feel at this moment more anxious for the safety of my country than ever before, even in the midst of the war."

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Let us briefly sum up the effects of the competitive system:

1. It neutralizes industrial forces by bringing them into opposition, instead of harnessing them all to industry's car in parallel lines.

2. It creates a feverish force in some men, not for the sake of useful labor, but for victory over their fellows, and it leaves the great mass of men wholly inert, to be driven by their necessities to reluctant labor. It misuses and wastes far more vigor than it creates, even inside the class who most feel its fever. It energizes a few in the race for wealth, more than is good for them or for society. In the rest it devitalizes the very nerve of energy by depriving them of all interest in their work. The total energy and productiveness of a co-operative group, well managed, is vastly greater than that of a competitive group. Reason says so, because interest is the most fruitful source of energy, and in a co-operative group every one is interested to make the product large, while in a competitive group only a few have any interest in the size of the product. History says so, also, as any one may see who will examine the story of any well-handled co-operative or profit-sharing enterprise.

3. Competition puts a million in the pockets of an ignorant, idle dude, and loads his splendid industrious neighbor with misfortune and debt.

4. It sets a delicate man to handling heavy bars of iron, or pounding stones on the streets in the boiling sun from early morn till dusk, with a ponderous mallet that even Goliath or Samson would hate to become too familiar with, while a strapping six-footer sits by in the shade, on the sidewalk, selling a handful of shoe-strings or a few quarts of peanuts as his day's contribution to the world's work.

5. It makes despots and liars of many successful business men, and slaves of their betters.

6. It ruins the lives of millions with misery and want, and mars the lives of others with pride and luxury.

7. It builds the slums of the cities, and the hate-engendering palaces of the rich.

8. It has given us a standard of value and a division of labor that sacrifice manhood to merchandise.

9. It gives activity and growth to all that is hard, combative, unscrupulous, and unsympathetic in man, and hinders the development of brother-love, helpfulness, truthfulness, and public spirit.

10. It rewards injurious activities, and gives some of the highest prizes as a premium for some of the greatest wrongs, dishonesties, oppressions and injustices.

11. It is destructive of liberty and individuality, as well as of virtue and comfort; it ruins men, body and soul.

12. It condemns vast numbers of children to a birthright of misery, disease and sin.

13. It causes dissensions that break out into Buffalo strikes and Homestead strikes, which cost the public treasury half a million to quell, and the strikers and employers another half million in damage and loss.

14. It periodically disturbs the nation's industries with flurries and panics.

15. It gives the keys of the world's wealth to Wall Street gamblers.

16. It wastes five-sixths of the industrial forces of the world with its planless production, panics, strikes, its inelastic and degrading wage system, that treats the laborer as a commodity and denies him the energy born of an interest in his work and its profits, its insufficient care of education, and the innumerable conflicts and useless duplications which it occasions.

17. It has given us 4,000 millionaires and polymillionaires, 100,000 anarchists, 200,000 prostitutes, 400,000 gamblers and liquor men, 100,000 engaged in

the opium and tobacco trade, 300,000 more criminals who are recognized by the law as such, and over 1,000,000 idlers and tramps—one-tenth of the nation's industrial force, utterly useless or worse than useless.

18. It has given us a distorted civilization, in which 1 per cent. of the people own more than three-fifths of the wealth, 5 per cent. are in chronic want, 5 per cent. are pernicious or useless, 10 per cent. insufficiently nourished, 50 per cent. unjustly treated, receiving less of power and wealth than is their due, and 90 per cent. insufficiently and improperly educated.

19. It puts wages down by its waste and its debasement of the worker.

20. It prevents the survival of the fittest—those who are really best.

21. It has created monopoly, and aids and abets its robberies.

22. It has given us a distribution of wealth, and an organized antagonism of labor and capital, that threatens the life of the republic.

23. It has given us a civilization in which the bad and disruptive elements are increasing five times as fast as the good and cohesive ones.

Such are some of the charges that justice and kindness are preferring at the bar of human progress against the arch offender of our time. It is the most terrific indictment ever brought against any institution in any age or country. Competition is the insanity of the past, the colossal crime of the present.



## Laundries in Great Britain.

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As there has been some grounds for complaint regarding sanitation and overwork in laundries in this city it may be well to read the opinions of those living where the evils are recognized.

The Daily Chronicle says: "There are two reasons why laundries and wash houses ought to be brought under the factory acts: First, for the protection of the washerwomen and the children who are employed; and, secondly, for the protection of the public."

The special commissioner of the Lancet reported as follows: "We found one cottage in Kensal New Town where washing was taken in from thirty families and where the washerwoman's son was ill with small-pox. In Blackfriars Road a woman took in the washing of a children's school and of several families while three of her sons had small-pox. In Bedfordbury a woman occupying a single room had collected the linen from several neighbors to wash, though her children were sick from small-pox and lying on rags in her one single room. In a street of Peckham, occupied principally by laundresses, we found small-pox in thirty out of seventy houses."

Anyone can perceive with the least reflection that a laundry in a bad sanitary state, or frequented by persons who are in close contact with infectious diseases, is certain to spread contagion and to scatter it over a larger area and with greater precision than

almost any other agency. Schools, hotels, restaurants and private families send their linen out and they get it back clean—that is all that is known about it in the majority of cases. But what a pleasant reflection to think that the clean linen which you wear, the sheets on your bed, the napkin in the restaurant, may have the seeds of contagion wrapped in them, to think that your nicely ironed shirt may have been dried in a room—possibly your washer-woman's bedroom—where children lay ill with scarlet fever. And yet these risks are run every week, and not in London only. The laundry and wash house which ought to be most minutely and scrupulously inspected places, are practically not inspected at all by the sanitary authorities; every cottage and cellar where a woman likes to take in washing is licensed to spread contagion. And yet we wonder how it is that fever breaks out in such unexpected places, where, in the natural order of things, it has no right to appear at all.

How comes it that, whilst in every other industry where women and children are employed, the hours of labor are regulated, night work is forbidden, machinery is fenced, meal hours and holidays are fixed and sanitary provisions are prescribed, laundresses are absolutely unprotected? Apparently the omission is due to a mere technicality.

Mr. Asquith's intention of giving the washer-women the protection they so sorely need has been received as good tidings of great joy by the poor women who have been neglected or trifled with in the past. They were bitterly disappointed by their failure in 1891, when, in spite of all their efforts, meetings, Hyde Park demonstrations and deputations, they found themselves left out in the cold. Mr. Asquith's action has made them feel that after all they are not to be outlawed for ever, whilst every other woman worker is protected.

Cases have been brought to light frequently in which work goes on from an early hour in the morn-

ing till 11 and 12 at night without any extra meal time. Sometimes the hands are kept washing through the whole of Friday night, after a long day's work, till midday on Saturday. Several of the factory inspectors report that the laundries are frequently kept going all night, and the case of the poor woman who worked forty-two hours at a stretch is mentioned. These fearful hours are worked, it must be remembered, as a rule, under the most trying and unsanitary conditions. Go into an ordinary wash house where a few hands are employed and you will find the women standing at their tubs on an uneven floor, where the water collects in little pools; their clothes are pretty well saturated long before their work is over and their feet are wet through. They take their food sitting on an upturned basket in the midst of the reek and steam. When the gas is turned on at night these places, whether underground or above ground, become choking. The fumes of the chlorate of soda, whose devastating properties most of us have cause to deplore, remind you of the alkali works, and give a sickening pungency to the damp and spongy composition of gas, steam and fetid air which the women have to breathe. In the ironing room, where the drying is generally carried on as well, for economy of space, the temperature ranges from seventy-five to 100 degrees, and there is no sort of provision for ventilation. The sanitary accommodation in the place I have visited was infamously bad. No wonder the poor creatures are crippled with rheumatism; that you find wards of the consumption hospitals crowded with them; no wonder they drink; no wonder their character goes sometimes with the ruin of their health and spirits. In many of the steam laundries the sanitary conditions are better and the hours worked are not so excessive. But the quantity of rapidly moving machinery and the number of young girls employed, make their supervision quite as necessary as that of the smaller places.

## Addresses to the World's Labor Congress.

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Extracts from some of the speeches and papers delivered and read by members of the labor congress convened in Chicago, at the hall of Washington Memorial Art Palace, Monday, August, 28, 1893.

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Miss Kate Field read a paper written by Lady Emilla Dilke, of London, entitled "The Industrial Position of Women in the Labor Market of the United Kingdom."

Lady Dilke described the condition of the women workers in the hardware factories, which was simply deplorable. Women were compelled to perform the same amount of work as men, yet they received much less pay. In some instances employers compelled women to work for them under threats that their husbands and brothers would be discharged. By this means employers obtain cheap labor.

To show how employers discriminate against female labor in the matter of pay, Lady Dilke said that in a factory which formerly employed 1,000 men, 1,100 women now do all the work but receive over a third less wages than was paid the 1,000 men. The homes go to pieces and utter wretchedness results from this horrible state of affairs. The writer describes the miserable condition of the match makers at Shoreditch and the sack makers at Dundee. The matches are made by women and children entirely, who are paid ridiculously low wages, and yet, said

Lady Dilke, the companies are making enormous profits. The weavers of Yorkshire, although skilled laborers, are but little better off. The file makers of Sheffield, who include many women, all receive the same wages, but the women abuse the right and protection afforded them by the trades unions by setting up sweat shops at home and employing juveniles to do the work. She briefly referred to the good work done by the trades unions, but does not believe that the labor problem can be solved on that line.

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Herbert Burrows, of London, representing the English social democratic federation, corroborated Lady Dilke's statements. He told of the women who work twelve hours a day for \$1.25 per week in the rail and chain forges of Cradleigh Heath, and there were many damp eyes in the hall when he said that they hung their cradles containing their babies over the forges to prevent their babies from freezing or starving at home for want of care. He told of a strike among the match girls of London, in which he and Annie Besant championed their cause. He said that among the stockholders in the company employing the girls were over fifty clergymen of the Church of England. Mr. Burrows declared that the ministers refused to participate in an attempt to better the condition of the girls, because it would diminish their dividends. The defeat of the home rule bill in the house of lords practically verifies Mr. Burrows' statement respecting the attitude of the church in that country towards the laboring men. It is claimed of the twenty or more ministers holding seats in the house of lords, all voted to defeat the measure. Continuing, Mr. Burrows said that "the sentiment in trades unionism in England is equal pay for women who do the same work as men, and we declare that the woman question must be settled in labor circles before the labor question can be satisfactorily settled."

Mrs. Helen Campbell, of New York, read an interesting paper on "Industrial Conditions of Women and Children." In part, she said:

"It was the growing of the first bales of cotton on American soil and the beginning, in 1789, of the factory system for the United States, that women's active share in industries was first recognized. It was to the United States census for 1860 that we must look for the first really definite statements as to the occupations of women and children. The returns specified 285,000 women at work in manufactories, but stated that the figures were approximate merely. So far as could be ascertained in 1870, there were 1,838,288 women workers, 191,000 of whom were from ten to fifteen years of age. With war times and the throwing of countless women on their own resources, the rate of increase in women wage earners, between 1879 and 1889 was nineteen per cent. against an increase of men of only 6.97 per cent. In the census of 1880, the total number of women at work is given as 2,647,157." Mrs. Campbell told of the factory abuses in New England and New York state, showing that women and children sorely needed the bureaus which have been organized for their protection. The labor bureau of Massachusetts shows that the average weekly earnings for the average time employed, 49.95 weeks is \$6.01, and the average weekly earnings for a whole year, \$4.91.

The speaker gave a few examples of the condition of women workers in the various states. Richmond, Va., gave the lowest wage, \$3.86, and San Francisco the highest, \$6.96, the average for all cities being \$5.24. This was for skilled labor, the pay for unskilled falling far lower. Indiana made an evil showing. Shirts were made for from thirty to sixty cents per dozen. Labor Commissioner Peck states that starvation wages rule in Indiana for women. The shirt makers who compose a large share of the women workers, are worse off in California

than in any other state, excepting New York, receiving, even when skilled working women, never over \$2.87 a week.

"Deliberate cruelty and injustice on the part of employers are encountered only now and then," said Mrs. Campbell, "but competition forces the working in as inexpensive a manner as possible, and thus often makes what must stand as cruelty and injustice necessary to the continued existence of the employer as an industrial factor." Home conditions are seldom beyond tolerable and more often intolerable. "Inspection," she said, "is what is needed."

Mrs. Campbell painted a terrible picture of the tenement factories of New York. Women and girls there employed are packed like sardines in a box, without sufficient light or ventilation. In bakeries the girls are obliged to stand ten to sixteen hours a day, and they break down after a short time. In the soap factories, type foundries, book binderies and brush manufactories, where women and girls are employed, conditions inimical to their health and comfort prevail, and it requires the most rigid inspection by the labor bureau to keep their surroundings at all endurable. She also found fault with the rule that clerks must always stand in stores, whether at work or not.

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Dr. McGlynn's remarks in part were as follows:

It occurs to me that the labor question is the problem of human life here below. It means more than manual labor and wages. It is a common error to limit labor to mere muscular action. To confine the labor question to such limits is degrading it. We are speaking of the labor of man that distinguishes man from mere brute.

When we talk of human labor we mean a labor that has a motive behind it more than animal force. Man is a conscious being, with ambitions, with a desire to know from whence he came, with a bound-

less hunger for truth. He discovers that he is not satisfied with the mere tangible world. But he longs for the eternal, the ideal of life. And, again, man is conscious of a longing for the beautiful. This has more pertinent relation to the labor question than might seem. How shall man so live as to cultivate his faculties and to attain that for which he was created? How shall we maintain our lives and pursue happiness? That is the labor question. It is a fallacy which I would rebuke that it is the coarser labor that is most worthy of consideration. I stand here to assert in no spirit of unkindness that that labor is most worthy into which the most brain has been put. What shall we say of the man who makes a musical instrument or of a great composer or writer? To which of these shall we assign the noblest place in the temple of love and on the pages of history.

This is the true definition of labor. It is the use of powers, whether of hand or mind. So, instead of being degraded by being called a laborer, we shall be outraged at not being called a laborer. The labor question will never be practically solved until we solve the problem of the beggars and of the thieves. There is no room here in our world except for workers. We believe in a pacific policy. Violence only defeats its own aims. Violence is a crime and a blunder. The labor question is, then, the question of men. It becomes the question of how we may lighten burdens and make life easier for every man or woman. It becomes a question of how we may, in increasing numbers, be able to live worthy of the God who made us. The labor question is, how shall society carry out in practice the rights which the Declaration of Independence tells us are ours? The preamble of the Declaration of Independence should be a great comfort to every religious man and woman. Take away the idea of the brotherhood of man, and human life cannot be worked out on the principles of human justice.



The practical deduction of the labor question is, that men are brothers; consequently created equal. The idea of brotherhood shall be preserved. It is the doctrine of the single tax. I may as well let the secret out. It is the primary duty of society to see that no man shall be permitted to tax his brother for benefits which he enjoys because of them. The destiny of the labor movement, I believe to be, is to restore to the people their rights; to hasten the coming of the day when every man shall have his rights.

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On Wednesday, the third day of the congress, men and women prominent in labor circles addressed 10,000 working men on the vacant field on the lake front. Bishop Fallows was the first speaker, and said in substance, as follows:

The laboring men, in spite of everything that seems to be to the contrary, have got a hold on this country. Some of you think that hold is not as fast and firm as you would like to have, but I can tell you that you have a good hold, and that there is a better time coming for the laboring man. You have the ballot in your hands, and with that mighty instrument, intelligently used, you are the rulers of this nation. And you are thus rulers, not by the grace of any king or queen, but by the sovereign grace of the Father in heaven, who, as Doctor McGlynn, has said, is not a step-father to any of his children, but a true father to all. So you and I are not step-brothers, but brothers by blood and by the tie of a common creation. Most of you have come here as unemployed men. You have the right to come here and to have your cry for work and for bread heeded. From causes that were beyond our control, an industrial crisis has come upon us. It is not a theory, but a condition with which we are confronted.

Some of the papers have said that no signs of famine are to be seen on the faces of the men who

have been gathering together from day to day. God forbid that we should wait until famine has graven its line deep in the faces of men who are out of employment before we take measures to relieve them, for we know that unless something is done, famine must confront you. I have studied the movements in different cities in the past, of those who are unemployed, and I want to say, to the honor and credit of this city, that there has been a prompter responsiveness to the need of the unemployed than I have seen elsewhere. There is a deep, deliberate, determined purpose to do all that can be done in the way of giving employment to all who are seeking for it.

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Some distance from the place where Bishop Fallows was speaking, Henry George, of single-tax fame, faced the largest audience he had ever addressed. As usual, he took for his theme the land question, saying as follows:

It seems to me that to be asked to address a meeting of the unemployed at a time like this is much like asking a pilot to take charge of a ship when in the breakers. I have for years been predicting just such a state of things as that now upon us, and pointing out the inevitable causes and the remedies. As to the immediate necessities of those in distress, I can say nothing more than any one else. All I can do is to point out the cause and state what the cure is.

Unemployed labor! Men ready to work, anxious to work, and yet not able to find work! Is it not the strangest of things. Unemployed labor! Men wanting things they need and to gratify their desires, and unable to use the only means by which their wants can be met and their desires satisfied. There can be but one cause. What does unemployed labor mean? Does it not mean there can be no exertion of labor upon land? Can there be in any country

men not able to find an opportunity to work unless the natural element has been monopolized? There is no such thing as unemployed labor, unless it is shut out from land.

The reason of this most striking phenomenon is clear. Land is acquiring higher and higher value, so that those who would employ labor must pay a higher price for it; labor and capital must get less. Here, and not in the currency question, lies the cause of depression. A steady advance sets up speculation in every material of life and labor tends to crowd down the returns of producers. With every improvement there grows the value of land. From nothing, it gets to have an enormous value. The one thing that increases in value is land. He who would certainly get rich has only by some means to get land where the population is increasing, the country growing, and centers advancing. If a man were an idiot he would get rich under these circumstances. In all seasons of prosperity the effort is to get land—not to labor on it, but for profit.

It seems to me that there is one explanation, if we look into the matter in a large way. Labor of itself can produce nothing. It is beyond the power of labor to bring something out of nothing. All our wealth, all that labor produces, must come from the material of nature existing before labor. Labor can produce nothing without land. Labor without land is merely a potential power, incapable of exertion. The condition of labor must always depend upon its relation to land. The moment we realize that, we have but to look over the civilized world to see the bottom of the trouble. Everywhere throughout our Western civilization, land—the element without which there could be no labor and no wealth, our standing place, our reservoir, our workshop—the human being must use or he cannot exist. Land is everywhere appropriated by some, to the exclusion of others. Why is it that the laboring class all over the world is the poorer class? Is it not because the

laboring class is a disinherited class? There is the bottom of the labor question. Until we come to that we cannot accomplish anything. No human invention can alter this fact, that the human being is a land animal; that he can only live on land and only work on land, and that no matter what be the form which the division of industry has given to his peculiar exertions, the maintenance of human life, the satisfaction of human wants, all that we call human production is, in the last analysis, an expenditure of labor on land, and that whether he be working down in the coal mine, or in the highest story of the tallest factory; whether he be opening the ground, or whether he be sailing the sea, all human production, in the last analysis, means the change of matter in form or place so as to adapt it to human satisfaction.

Begin at the other end. Here we have at all times in our modern civilization great numbers of men working, and working hard, for what, compared with their production, are most insufficient wages. What is the reason for that? Why does not labor get its fair share of the product of labor? Ask one of these men who work so hard for insufficient remuneration. He says he works because he can get nothing better; he works because he is afraid to leave his employment. Thousands of other men would be willing to come and take his place. Insufficient wages, therefore, are clearly due to the fact that there is a difficulty to find employment. What can that come from? Labor produces wealth, and until all human wants are satisfied, there cannot be any real overplus of labor.

Now, therefore, at the bottom of this whole social difficulty we find the land question. The reason that wages are low in the higher industries is, that labor which proposes to apply itself directly to land is forced to pay a premium for the use of the land itself. Therefore, the labor question cannot be solved until you open the land to labor. You can do nothing in the way of raising the wages of men who

work for others until you raise the wages of men who work for themselves in the most primitive occupations—the application of labor direct to land. In this way we can prevent speculation in land values, by speculators and monopolists, so that the man who holds a specially valuable piece of land will pay to the community in proportion to the value of the land. If we do that, then it profits no one to get land for the purpose of holding it and getting a return for the mere holding of it, which produces nothing. We want to take the public revenues from this unearned increment of land. It is in the nature of things that land values increase with the growth of population and the advance of society. That can be seen everywhere. This increased value given to land from the growth of society should be taxed for public purposes. In this single tax idea we have the solution of how to open land to labor. If this tax were placed on land, no man would want a piece of land who could not use it, and the mere land owner—that utterly useless animal—would cease to exist.

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Upon the subject of labor, Doctor McGlynn charged that monopoly was the reason that idle men came together on the lake front, and he addressed a sea of faces, as follows:

I want to ask one question, and that is, whether the myriads of men I see before me now are workingmen, beggarmen, or thieves. A witty Englishman coined this phrase, but said that there ought to be workingmen only in the world—that everyone should contribute to make this world better by his brain or brawn, mind and muscle, or by a happy conjunction of both. Unfortunately there are three classes of people in the world—workingmen, beggarmen, and thieves. The conditions should be such that every man would help to maintain the rights, and to see

that all should find an opportunity to be useful. Beggar-men and thieves should be abolished, not by destruction, but by being converted into useful men.

All you before me now are idle men, I suppose. In these hard times men cannot afford to knock off work to listen to speeches. You are workingmen who would work if you could get something to do.

When I look upon this crowd here, I think it is a terribly humiliating spectacle in this great metropolis of the West. By a singular and strange coincidence, this happens at a time when the whole world has sent its most beautiful products here, and the wonders of the human fancy, the miracles of the human brain and the most subtle creatures of the human mind are on exhibition in the "White City." At this very moment, sad to say, a vast army of unemployed men are meeting on the lake front seeking work amid plenty.

Why are you here in this most plentifully supplied country? Is it because the country is overpeopled, or that there is nothing to work upon? It is a monstrous fallacy to assert this. Is there not more territory than is sufficient to support all the world? The true philosophy is in the exertion of human energy, and the reason you are unemployed is because you cannot get at the natural bounties; not because you have no materials to work at, but because something has come between you and the materials. That something is monopoly. It is stupid to shut our eyes to the truth, that when we give undisputed ownership to natural bounties we are dragged nearer to serfdom and slavery.

It is not a question of your getting a farm. The question is, How shall you employ yourself? You want work in mechanical and artistic lines which are found in large centers of civilization only. The reason why corner lots in Chicago are so valuable, is because labor is enormously more useful here than in the country. It is very poor comfort to say: "Go

and get a farm for nothing." It usually means that you can get nothing out of the farm. You don't want a farm. You can't wait until the cabbages grow. It is the utilization of natural bounties you want. Is there not room for more buildings here? Don't you need better drainage, better light, cleaner and better paved streets?

It is only by your political influence, by your votes, that you can compel the abolition of monopolies, which are maintained because of new values given by the growth of civilization, in which you have a part. Until you compel owners to pay into the treasury a proper equivalent for the privilege to enjoy undisturbed the possession of the lands they cherish, will your wages be reasonable.

Try to vote for this at the next election. Get your representatives to put this plank in their platform.

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George E. McNeill, of Boston, said:

The labor movement is born of hunger—hunger for food, for shelter, for warmth. The labor movement is the outward expression of the instinctive appreciation of these rights. Possession is said to be nine points of the law. In nine cases out of ten it is an evidence of theft committed, and the giving back of a beggarly part in the sacred name of charity is a confession of a guilty responsibility.

The labor movement commenced with those who, by the crudest form of association, agreed to mitigate their woes, and to resist the common oppressors. It has, from remote antiquity, developed along the line of the increasing aspirations, wants and demands of the most intelligent classes.

From its dawn it has been semi-religious, semi-political, and industrial. As the ranks of the labor movement are composed of the controlled classes, they are necessarily opposed to the controllers. This

fact explains the reason for the political side of the movement, whether under monarchical or republican form of government.

Material civilization rests upon the want of more, regardless of the wants of others, and the demands for more at the cost of another's sacrifice. This sort of a civilization gave us Egypt, Rome, Greece and Athens. It gave us the slave trade, chattel slavery, and the civil war. It gives us to-day this wonderful exhibition of a labor-robbing prosperity, magnificent buildings, time-and-cost-saving machinery and processes, club-palaces for idlers, and hovels for workers. It makes vice profitable, rewards gambling enterprises, stultifies the moral sentiments, laughs at religious restraints and mocks at political rectitude. The industrial system rests upon the devil's iron rule of every man for himself. Is it an unexplainable phenomenon that those who suffer most under this rule of selfishness and greed should organize for the overthrow of the devil's system of government? The organization of laborers in trades unions recognizes the fact that mutualism is preferable to individualism. The labor movement is a self-evident fact which has sprung from human needs and aspirations, and has grown in power as animal needs developed into social needs of even greater power. So it will grow until the needs of the diviner man become the potent factor in the development of the full measure of man's highest possibilities.

Men who are compelled to sell their time are slaves to their purchasers. Men who control their time to the good of others are free men. Freedom means ability to serve others with others for the good of all. Slavery means the service with or without others to the pleasure of the class or individual. The man who produces anything that is for the good of man has a natural lien upon that product of all, as all have a social lien upon his product.



The law of the labor movement may be stated to be: First, appetite; second, hunger; third, more appetite; fourth, more hunger. Inordinate appetite begets savagry, and will commit any crime to satisfy its lusts even temporarily, but, as the satisfaction of lust or inordinate appetite finally destroys appetite and the pleasure of its satisfaction, so any system based on the motives or activities of inordinate desire may be, and is self-destructive. Laborers restrained by chains of iron or of superstition or of ignorance, or by social ostracism, or political or industrial dependence, are simply a pent up force that may break loose with unrestrained, destructive power. The appetite to-day is for better food, better houses, better clothes, better pleasure. The cry for more is the eternal cry. Yesterday and to-day it is with many a moan of sorrow, with many a bitter cry of anger, with some natural wish; to-morrow it will be a cry of joy.

The philosophy of the labor movement teaches us that the law of common fatherhood and brotherhood that Christ proclaimed is the law of the wisest self-interest; that in mutual advancement and not self-aggrandizement is to be found the solution of the problem of how to abolish poverty, and that the organization of wage workers on the historic lines of more leisure and more wages will continue until methods and interests shall unite in maintaining, sustaining and enlarging human happiness.

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Friday, the fifth day of the congress, was taken up with the discussion of the government ownership of railroads and the public ownership of all agencies to supply public needs. Prof. R. T. Ely, of the State University of Wisconsin, read a valuable paper on the subject of government ownership of railroads. He said: "The policy which in the United States has heretofore been pursued with respect of these undertakings has been to turn them over to private cor-

porations and to encourage attempts at competition. The results of the policy are now clearly manifest. As these classes of business are non-competitive, every attempt to force competition upon them, means a waste of a great amount of capital and labor.

"A second result of this policy is the enormous inequality of fortunes in the United States. A large proportion of our mammoth fortunes can be traced to this false policy.

"Had the post office been private property we would have had a still larger number of multi-millionaires, who would have absorbed a large proportion of the benefits of improvement in that business. A third result is a growth of artificial monopolies, and a fourth is seen in the dependence of the rest of the community upon those who furnish services or commodities of the kind which fall under the designation "natural monopoly." With respect of those undertakings, it is not a question as to whether we shall have private competition or not, but only a question whether we shall have private or public monopoly, and public monopoly is preferred to irresponsible private monopoly.

"The general aim in such industrial reform must be the reduction to a minimum of unearned incomes, and this general aim is in harmony with the clearly expressed views of the founders of this republic. Any effort to carry it out is pre-eminently American, while opposition is essentially un-American. A further aim which, it is claimed, the reform advocated would promote, is the elevation and purification of public life. The workingman would be affected by this reform, inasmuch as he belongs to the social body. The monopolist is not likely to be a good employer of labor. If the government is the employer, then the employed have representation in the controlling body, ample to protect their interests.

"In the hands of private corporations, men on transportation lines necessarily have grievances, because of the danger to life and limb and the annoy-

ances incident to management. With railroads run by individuals, there are accidents and disasters which would be impossible if they were under government control." The speaker compared the results in this country and in Germany, and then asserted that, in addition to insuring greater safety and security under government management, the people had more confidence and reliance in the business. This idea he impressed by asserting that public service gave more dignity than private service.

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Henry D. Lloyd, of Chicago, presided and before introducing the speakers on Sunday evening, made the following brief address :

"It is fitting that the Sunday evening of the labor congress should be given to the church. The declaration that in the sweat of his face man should earn his bread, was more than a command; it was a promise. It was the declaration of the right that every man has to work, and that every man that works has a right to bread. It is fitting that the representatives of the spirit that gave the world that declaration should meet with us tonight to discuss why it is that everywhere, not only in the old world, outworn with struggling, but in the new world, and in the newest cities of the new world, those who have done work must beg for bread. Cardinal Manning once said, 'Necessity knows no law, and the starving man has a right to live on his brother's bread,' and when he was challenged by the London Times and other priests of Baal he was able to prove that his saying had been the unbroken law of the church and was entrenched in the very ground work of truth."



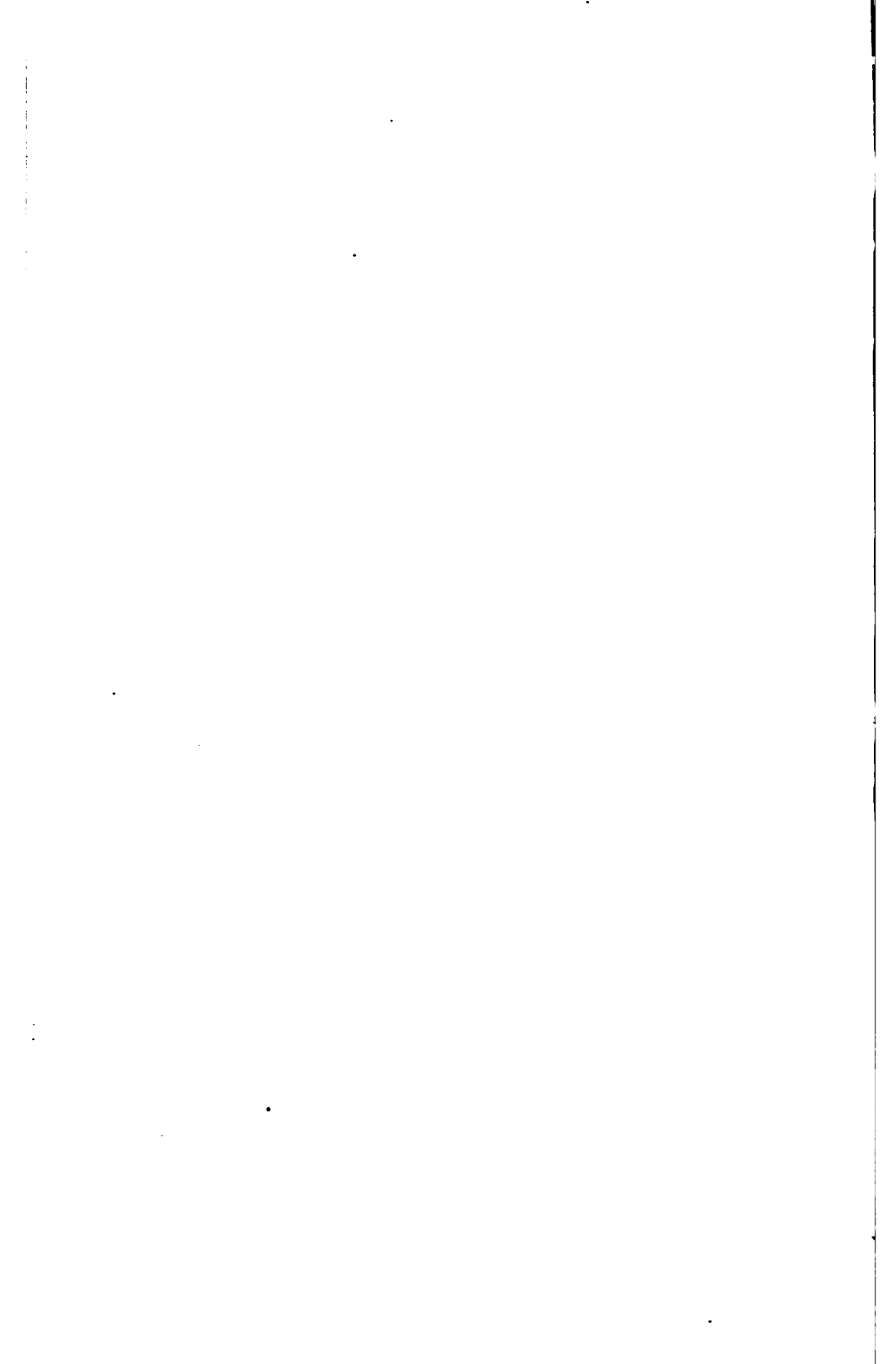
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